A Review of the Mandate of the Colleges of Applied Arts and Technology

VOLUME 1

Study Team Final Reports

VISION 2000

Study Teams 1, 2 and 3

In October, 1988 a major review of Ontario's college system was set in motion by then Minister of Colleges and Universities, the Honourable Lyn McLeod. The Ontario Council of Regents, an agency which reports to the Minister, was asked to oversee the project and develop "a vision of the college system in the year 2000."

Vision 2000 established a Steering Committee comprised of educators, students, employers, labour and government representatives. The role of the Steering Committee was to guide the process.

Consultation, with a wide variety of stakeholders, and research was handled by five study teams. Study Team 1's task was to provide an empirical snapshot of the current college system and its external environment. Study Team 2 was to examine the role of the colleges in the economy, while Study Team 3 looked into ways to promote access and educational support for diverse learners. Study Team 4's mandate was to study the challenging interrelationships of quality, accessibility and efficiency. For Study Team 5 the research and consultation focussed on the linkages between colleges and other educational institutions.

Volume 1 contains the Final Reports of the Study Team 1, 2 and 3. These reports do not necessarily represent the views of the Vision 2000 Steering Committee, the Ontario Council of Regents, or the Government of Ontario.

A Foundation for Thought and Action
Final Reports of the Vision 2000 Study Teams

We are pleased to present the Final Reports of Vision 2000's five study teams. The reports contained in Volume 1 are those of Study Team 1, 2 and 3. Each report, in both content and format, reflects the unique focus of the study team that authored it.

The reports represent more than a year's worth of research, discussion and consultation with several thousand individuals and groups, both inside and outside the college system.

Collectively, the final reports were designed to provide the Vision 2000 Steering Committee with a broad range of thought provoking recommendations. While not exhaustive of all the issues that face the college system in Ontario, the recommendations contained in each report offered a constructive foundation for the Steering Committee's deliberations.

We, and the college system, owe a great deal to those who participated in and supported the work of the study teams. Thanks must go to the 98 members of the five teams who volunteered their time for this effort. We gratefully acknowledge the work of the five study team chairs: Howard Rundle, Lorna Marsden, Ruth Gates, Keith McIntyre and Penny Moss. We also recognize and appreciate the extraordinary efforts of the study team executive officers: Brian Wolfe, Riel Miller, Francie Aspinall, Harv Honsberger, Starr Olsen and Terry Dance.

We hope these reports will be helpful to you in your deliberations and planning. Circulation of the Study Team Final Reports is no intended to reflect an endorsement of their content, but to share with you, in a timely fashion, the input we received.

Sincerely,

The Vision 2000 Steering Committee

Study Team 1: Empirical Features of the College System

Final Report

Table of Contents

At the outset of its work, Study Team 1 intended only to undertake a series of 'miniprojects' which could serve as background material for the other four study teams. Summaries of the findings of each project are provided in the Appendix, "The College System — An Empirical Snapshot."

In the course of doing the miniprojects, however, it became clear to us that a fundamental question facing the college system requires some attention, that question being: "How should the college system respond to the quality - access - funding trade-off(s)?" The resolution of the 'conflicts' or trade-offs inherent in the quality - access - funding relationships, and the process by which these conflicts are resolved, ultimately determine the performance of the college system. The resolution of these conflicts also affects how the system is perceived by students, their teachers and parents, employers, and tax-payers at large.

The interrelationships among quality, accessibility (in terms of both numbers and types of students), and funding are not easily defined in any precise manner. For example, if total revenue (measured in constant dollars) to the college system were to remain constant over a given period of time, initially it might be possible to increase enrolment without adversely affecting the quality of education. Colleges might be able to undertake actions such as reducing expenditures on equipment, capital maintenance, and professional development of staff; reducing program hours (with commensurate increases in independent study); and increasing the utilization of their staff. In the short run, these actions may lead to increases in accessibility through gains in efficiency (i.e., through reductions in per student expenditures without any accompanying reductions in quality). And some measures (e.g., improved staff and facilities utilization) may even have the potential of providing permanent, long run efficiency gains.

Any measure if taken too far, however, will adversely affect the quality of education, although the impacts may not be 'visible' for some time. Equipment will not deteriorate overnight, nor will staff morale or their performance. This can lead to a false sense of security among government and college decision-makers. It may also lead to following a particular policy direction (e.g., increasing accessibility without increasing real revenues) to the point that unintended outcomes (e.g.,

unacceptable reductions in quality) occur. Thus, in developing answers to the question, "How should the college system respond to the quality - access - funding trade-off(s)?," one must also undertake steps to gain a better understanding of the nature of the trade-off itself.

In this report, we begin with a description of how we perceive the college system responded to the quality - access - funding trade-off in the past decade. We then look forward and ask how conducive will the future environment be to improving quality and access. The report concludes with a set of recommendations. The recommendations, which are far from comprehensive, include what we feel to be some necessary courses of action if we are to better understand and cope with the quality - access - funding relationships in the future.

For the most part, the report confines itself to these relationships as they pertain to college offerings funded by the Ministry of Colleges and Universities (MCU). At present, MCU funding accounts for about 50 per cent of total college revenues, and when associated tuition fees are included, the percentage rises to about 60 per cent. Almost three-quarters of college system activity (i.e., Full Time Equivalent [FTE] enrolment) is funded through MCU. The other two main sources of funding, the Ministry of Skills Development (MSD) and the federal government, account for approximately 25 per cent of college revenues.

The Quality, Access & Funding Trade-off, 1978/79 to 1988/89

During the period 1978/79 to 1983/84, the total MCU operating grant (measured in constant dollars) increased 1 per cent. Over the same period, enrolment (FTEs supported by MCU operating grants) increased 49 per cent; therefore, real funding per student provided to colleges by MCU declined approximately 33 per cent.[1]

It is possible to view this situation as representing either (a) a dramatic increase in efficiency, or (b) a decline in quality — or some combination of the two. While, at the time, the data[2] provided were interpreted by government to suggest that real gains in efficiency were being made, this interpretation was challenged in later analyses.[3]

During the period 1983/84 to 1988/89, the total MCU operating grant (measured in constant dollars) increased about 22 per cent. Over the same period, enrolment (FTEs supported by MCU operating grants) remained essentially unchanged, increasing only 1 per cent; therefore, real funding per student provided to colleges by MCU increased by approximately 21 per cent.[4] The low enrolment growth, however, was not the result of qualified applicants being denied admission to college programs; that is, over this period there appears to have been no intention to limit enrolment growth. Improving economic conditions and reaction to concerns expressed about the quality of education during the faculty strike in 1984 may have adversely affected enrolment rates.

---

[1] See Appendix 2, p. 70.

[2] See Report of Task Force on Productivity Indices, <u>An Analysis of Unit Operating Costs in Ontario's Colleges of Applied Arts and Technology</u>, 1978-79 to 1982-83, (Ministry of Colleges and Universities, 1984).

[3] See, for example, Report of the Instructional Assignment Review Committee, <u>Survival or Excellence?</u>, (1985).

[4] See Appendix 2, p. 70.

For this time period, the increase in real funding per student also may be interpreted as representing either (a) a decrease in efficiency, or (b) an increase in quality — or some combination of the two.

It is important to note that the reversal in MCU funding patterns coincided with three events, namely: (a) in 1984, a faculty strike over workload; (b) in 1985, the report of the Instructional Assignment Review Committee (IARC), a committee established by an Act of the Legislative Assembly to review all aspects of instructional assignments in the CAATs; and (c) in 1986, following prolonged negotiations, the introduction of a new workload formula for faculty. In addition, the major change in governing parties (1985) may have played some role, given the 'opposition' party's position on post-secondary funding patterns at the time of the 1984 strike.

The report of the IARC noted the differing views of faculty and senior college administrators on the reasonableness of faculty workloads and the impact of these workloads on the quality of education. The Committee concluded, however, that:

> The faculty viewpoint more accurately reflects current realities ... and those who are responsible for instructional assignments in the colleges are faced with a choice: either to allow the system to stabilize near or at a 'survival level' or to redirect their energies toward the achievement of excellence. (IARC Report, Letter of Transmittal to Minister)

The contract negotiations, which followed the IARC report, resulted in new workload provisions for faculty which significantly reduced their teaching hours. The new contract also led to the injection of $60M, by the provincial government, to allow for the hiring of additional faculty (approximately 800, an increase of 11 per cent). It should be noted that the additional funding was required to maintain accessibility, given the contractually-defined reductions in workload. However, in the absence of agreed upon indicators, the effects on quality remain a matter of interpretation.

In addition to reducing faculty workloads, the workload provisions are perceived by some to have led to rigidities which limit the system's ability to be innovative in program delivery and responsive to changing demands placed on it. One, however, could also make the case that the new workload provisions, with their many 'controls' on instructional assignments, place a premium on planning for change,

and, in the long run, this may improve colleges' responses to new demands from their communities.

From our examination of the period 1978/79 to 1988/89, we conclude:

(1) that the funding policy of government prior to 1984 led to unintended outcomes, namely: (a) the 1984 strike and its aftermath; and (b) the perception of many that quality had indeed declined and remedial action was required.

(2) that there are not in place effective mechanisms or processes for either (a) examining the quality - access - funding relationships; or (b) deliberately determining which actions are likely to be most effective in minimizing the negative effects (and unintended outcomes) of the trade-offs inherent in these relationships.

Early in the 21st century, if not sooner, the college system will likely be faced with conditions similar to those prevailing in the early 1980s, namely: increasing demand for places in the college system and insufficient government resources to meet this demand without reductions in quality.

Our concerns about the future relationship between the resource needs of the college system and the availability of public resources stem from many factors, including the following considerations:

(a)   The rather dramatic aging of our population, which will occur in the coming decades, will place increasing expenditure pressures on governments. The result will be that "the distribution of public resources among age groups may shift in a manner which does not favour post-secondary education."[5]

(b)   "While real productivity gains in an education sector are possible, history would suggest that productivity gains in this sector will not keep pace with gains in other more technologically-based sectors."[6] Given the labour-intensive character of education, it is likely that per unit costs in the college sector (as in other parts of the education sector) will rise relative to the per unit costs of many other types of economic activity.

(c)   Demand for college education is likely to increase as a result of rising income levels, technological change, industrial restructuring, and the effects of demographic changes. Pressure will exist to provide significant retraining opportunities to the existing labour force, as well as to meet the increasing expectations of youth to participate in post-secondary education.[7]

(d)   There are, and will continue to be, pressures on the college system to improve the quality of its offerings, particularly in the areas of remedial assistance for underprepared learners

---

[5] Vision 2000, <u>With the Future in Mind: An Environmental Scan</u>, (Toronto: Ontario Council of Regents, 1989), p. 37.

[6] See Appendix 2, p. 72.

[7] See Appendix 2, pp. 30-32; and Vision 2000, <u>op. cit.</u>, pp. 28 and 35.

(both younger and older) embarking upon post-secondary
studies and services provided to part-time learners and
special needs students.[8]

These conditions lead us to ask: How can *unintended* outcomes (e.g., unplanned reductions in quality) be avoided? Similarly, how can *undesirable* outcomes be minimized? For example, given limited public resources and the need to, at minimum, maintain quality, how can inappropriate limitations on accessibility be avoided?

---

[8] See Appendix 2, pp. 32-34; and pp. 40-45.

Recommendations

A. Support Structures

▲ 1   *A College System Strategic Planning Committee should be formed to: (a) develop mechanisms for examining the trade-offs associated with quality, accessibility, and funding; and (b) recommend strategies for addressing these trade-offs.*

The Committee should be composed of college administrators, college faculty, and government officials and should be a standing committee of the Council of Regents.

As part of its work, the Committee should:

    (a)   establish mechanisms for obtaining annually from the college system **and** its external environment comprehensive information, both quantitative and qualitative, concerning, for example: the types and number of applicants gaining and not gaining admission to college courses and programs; population groups who appear to be underrepresented in the college system; new approaches to the delivery of courses and programs which enhance efficiency and/or accessibility; resource inputs, which either in number are inadequate or in quality are deteriorating; and other indicators such as program hours, employers' and graduates' perceptions of college programs; and actual career paths and on-going training needs of college graduates. Such information should be collected for full-time and part-time activities of the colleges.

    (b)   undertake to 'determine' what it would cost per student for colleges to be institutions "that would be regarded as near the margin between adequacy and acceptability."[9] (The cost per student should be weighted to reflect differences among programs in unit costs and government-sanctioned differences among colleges in unit costs.) The results of this exercise would serve as a *minimal* bench-mark against which college revenues per student could be compared and would provide another means for monitoring and evaluating the level of support being provided to colleges.

---

[9] Howard R. Bowen, <u>The Costs of Higher Education - How Much Do Colleges and Universities Spend per Student and How Much Should They Spend?</u>, (San Francisco: Jossey-Bass Inc., 1980), p. 234.

While such an exercise necessarily contains many subjective elements, we feel it an important one to undertake. We note that a similar project was initiated in the United States in the late 1970s by Howard Bowen for the Carnegie Foundation.

(c) through the Council of Regents, provide annually to the Minister and to each college's Academic Council and Board of Governors a report which: (i) assesses the state of quality and accessibility in the college system and the existing relationship(s) among quality, access, and funding; and (ii) provides advice on directions the college system and government should pursue.

Initially the Committee might find these tasks to be rather daunting. However, Study Team 1 has been impressed with the amount of data already being collected, either by individual colleges or system-wide by MCU, which would be useful to the Committee. While some work on data collection is required, notably in the area of continuing education and in the development of indicators of quality, the analysis and dissemination of information derived from data systems already in place should benefit the system greatly (and at relatively low cost). Study Team 1 also notes that its own composition (i.e., government officials, college faculty, and college administrators), allowed for the perspectives and knowledge of the various constituencies to be simultaneously taken into account. We believe that this 'mix' led to a better understanding of college issues than would have been the case if the Team's membership had been more narrowly defined. Thus, we have no hesitancy in recommending a broadly based membership for the Strategic Planning Committee.

▲ 2 *The college system should establish the capacity to become an effective advocate of the value of a college education which is of high quality and is broadly accessible.*

Public awareness of and confidence in the value of a college education must be increased if the college system is to maximize its contribution to Ontario's economic and social development.

Colleges are generally respected as educational institutions.[10] However, there is evidence that public confidence in the performance of colleges is not as high as one would hope. For example: (a) prospective students do not appear to view colleges in as positive terms as they do universities — this seems to be in large part due to a concern that a college education leads to relatively early 'career-dead-ending';[11] (b) employers express concerns about the communication and problem-solving skills displayed by college graduates and, as previously noted, college faculty and observers external to the college system have brought into question the quality of education and training being provided in the colleges; (c) the adequacy of educational opportunities provided by colleges for disadvantaged or special groups within our population is being questioned; and (d) both the federal and provincial governments, through their increased emphasis on private-sector training, are indicating, if not directly, concerns about the costs of training provided by colleges. This environment is further complicated by increased competition from other sectors for scarce public resources, and this competition is likely to intensify as we approach the 21st century.

In this environment, it is essential that colleges not only improve, where appropriate, their performance in areas of public concern but, also, undertake effective two-way communications with their various publics — prospective students, parents, alumni, other educators, employers, labour and government. With respect to these communications, the college system should: (a) regularly engage the various college publics in discussion and debate on major college issues (e.g., the purposes of a college education, quality and accessibility issues, major curriculum reforms such as generic skills training, the costs of college education and tuition fees, and college resource requirements); and (b) regularly "make the case for the college system" to the public at large and the provincial government.

These responsibilities, which constitute what might be termed an advocacy role, are ones which we believe require some attention. In the past, the perception among some is that the college system's leadership has not assumed a collective

---

[10] See, for example, Appendix 2, p. 67.

[11] Appendix 2, p. 67.

responsibility for the advocacy role.[12] While the Committee of Presidents has in recent years sponsored some promotional activity, this work has not been seen to have been informed by a systematic marketing approach. With respect to lobbying government for more support, the only visible activity seems to be union initiated. This activity has been largely associated with collective bargaining activity and is perceived by some to be serving the narrow interests of the bargaining table rather than a broadly based and systematic effort to increase general revenues for the system. Regardless of perceptions, there seems to be a need for a systematic approach (not necessarily more visible all the time) to giving and getting information to and from decision-makers for the purposes of ensuring that they make more informed decisions regarding the college system.

What is required, we believe, is that the college system's presidents and boards of governors, collectively (e.g., through the Association of Colleges of Applied Arts and Technology of Ontario) and individually, assume the responsibility for "making the case for the college system" to the provincial government and the public at large. The advocacy role involves a variety of activities, ranging from informing the general public and prospective students of the value of college programs and of major college issues, to the development of position papers for presentation to the Minister and Treasurer. As well, it is important that local Board Chairs and Presidents develop and implement an effective means for regular two-way dialogue with their college region's MPPs. These advocacy activities must not, however, become a rhetorical exercise. If, in this advocacy role, claims are made that accessibility is improving (or declining), then these claims must be supported by reliable indicators which, where necessary, reflect regional differences in the composition of population. Similarly, if claims are made that quality is improving (or declining), such claims must be based on accepted indicators.

To do this effectively will require a commitment of resources by the college system. The government should not be adverse to contributing financial resources to assist the college system in its advocacy role. In addition, those involved in the advocacy role should have access to the background work of the Strategic Planning

---

[12] For example, see the Report of the Instructional Assignment Review Committee, 1985; and Charles Pascal, Thompson, Mora and Adams, Peter, "Perception of the Colleges of Applied Arts and Technoloyg: Interviews with Cabinet Minister and Other MPPs" (Toronto: Ontario Council of Regents), 1990.

Committee. Only if the college system performs its advocacy role well, will prospective students and government have the information necessary to make effective choices (e.g., enrolment decisions by students and resource allocation decisions by government) which reasonably reflect the public interest.

In determining whether improving the advocacy capacity of the college system would lead to demonstrable improvements in the amount of public and private resources allocated to the college system, the college system should look elsewhere to learn from others' experience. In the university sector, for example, the Council of Ontario Universities (COU), an organization composed in large part of university presidents, has consistently and strongly argued for increased funding. Yet in the ten year period, 1977/78 to 1986/87, operating expense per FTE student in the university system was as much as 17 per cent below the 1977/78 level (e.g., in 1982/83 and 1983/84). In 1986/87 it still remained 12 per cent below the 1977/78 level.[13] These data suggest that COU's efforts had little impact, at least until one examines the college system's experiences over the same period. As described earlier, the college system experienced a similar pattern of decline followed by some improvement. However the colleges' decline was more marked, and the improvement, although as significant as in the university sector, came only after major labour unrest in the college system. While, it may be a matter of conjecture, it would seem that COU's efforts had some positive impact on the level of resources allocated to the university sector. If nothing else, it demonstrated to university faculty and staff a concern by university leadership about the impacts of funding restraints. It is also difficult to determine what would have taken place without COU's efforts. Most importantly, the Committee of Presidents would be well-advised to evaluate COU's experience and the experience of selected government officials with the COU approach.

---

[13] Council of Ontario Universities, The Financial Position of Universities in Ontario: 1988, (1988), p. 18.

B. Revenue and Funding

▲ **3** *The impacts of increasing tuition fees should be fully assessed, in terms of the effects on college revenues and accessibility; and colleges should consider expanding their private-sector fund raising efforts.*

(i) Tuition Fees

What is the current status of college tuition fees?

In 1989/90, the standard tuition fee for a full-time, post-secondary student attending a CAAT is $685 for two semesters. This amounts to approximately $0.85 to $1.00 per student contact hour and represents, on average, about 11 per cent to 12 per cent of college operating revenues (standard fee plus MCU operating grant to college) attributable to the presence of a full-time student. The standard fee applies to all full-time students, whatever their choice of program and thus whatever the program cost per student contact hour. In the college system, the more expensive programs in terms of cost per student contact hour usually cost, or more accurately are funded as if they cost, about 40 per cent to 50 per cent more than the least expensive programs.

In addition to the standard fee, colleges may also charge students for non-tuition related items (e.g., the costs of learning materials, equipment, and clothing retained by the student).

International students pay a standard fee of $5,705 — a fee which is intended to reflect the 'full' per student operating expenditures of colleges.

The fee for a part-time student enroled in provincially-supported courses is $1.60 per contact hour. This fee represents about 25 per cent of college operating revenues (fee plus MCU grant) attributable to the presence of such a part-time student. In courses not eligible for provincial funding (e.g., general interest courses), part-time fees may be whatever a college deems appropriate.

Changing circumstances require an assessment of the tuition fee structure. In addition to the likely increasing limitations on the ability of government to provide additional resources to the system, the composition of the college student body is likely to change in fairly significant ways. For example, older students are likely to represent an increasing proportion of the college student body. Some of these older students will be attending part-time, while working; others will be attending full-

time and utilizing savings from past labour force experience; but, still others will be laid-off workers or persons on fixed incomes, attempting to improve their economic circumstances through training.

The proposed assessment of tuition fees should examine, among other things:

(a) the rationales (economic and social) for the level of subsidy inherent in the college system's fee structure;

(b) the objectives of current government accessibility, income redistribution, and economic policies as they relate to the college system and the effectiveness of current fee and student assistance policies in meeting these objectives;[14]

(c) the impact of alternative fee levels and structures and various student assistance schemes (grant and loan) on: accessibility and income distribution; the rates of return to a college education; and the total investment (public and individual) in college education. The alternatives considered should include, but not be limited to: (i) maintaining a standard fee but increasing it; (ii) establishing different fees for different programs, with fee differentials being related to differences in programs' instructional costs and/or differences among programs in the rates of return to graduates; and (iii) introducing an income-based contingent repayment loan scheme; and

(d) whether fee policy for part-time and full-time students should be the same (i.e., should part-time fees be simply pro-rated versions of full-time fees or are there significant reasons for developing separate and distinct fee policies for full and part-time students).

---

[14] In addition, consideration might also be given to expanding the assessment of student assistance practices to include an examination of policies governing students enrolled in private vocational schools. These schools, currently admitting about 30,000 students, represent for many students a reasonable educational alternative to a community college education. These schools add not only to the capacity of the overall educational system in Ontario, but also to the diversity of this system. At present, private vocational students are eligible for grant and loan assistance and may receive assistance up to the maxima established for CAAT students. We are not aware of any significant problems private vocational school students experience with current student assistance policies. It is possible, however, that at some point in the future it may be desirable, from a societal perspective, for private vocational schools to expand their role in the delivery of certain types of specific skills training. (See Robert Marshall, Private Vocational Schools — The Fourth Option?, [Toronto: Council of Regents, 1989] and Appendix 2, pp. 54-55.) This being the case, it may be necessary to alter financial assistance policies to facilitate greater accessibility to these schools. An examination of how alterations to the student aid policies might be made without injuring our publicly funded colleges may be worth considering.

It is important to note that the university sector has already begun an assessment of tuition fee policies.[15] Given that the colleges' role in post-secondary education is quite different from that of the universities, as is the make-up of students (e.g., in terms of family income), the Study Team believes that a similar study should be undertaken for the college system. It does not seem appropriate to use the results of an analysis of university fees as a significant input to policy discussions of college fees.

(ii) Private-Sector Fund raising

Estimates of college fund raising indicate that private-sector contributions account for approximately 0.6 percent of total system operating revenues. Thus, at this stage, private-sector contributions represent an extremely small proportion of system revenues. Even with very major increases, private-sector contributions would still represent a very small proportion of college revenues. (Government policy permits colleges to raise funds equal to five percent of their operating revenues, although Ministerial approval may be obtained to exceed this limit. Government policy also permits colleges, subject to Ministerial approval, to establish foundations; that is, non-profit corporations established to raise funds.)

In periods of constrained public funding, however, even relatively small private-sector contributions represent an important potential alternative source of revenue for the college system. As pointed out in the report of the Commission on the Future Development of the Universities of Ontario (1984), private-sector contributions can serve: "(a) to provide an important margin for improvement, so as to promote excellence rather than adequacy; (b) to support innovative and risky programs with potentially large long-range pay offs; (c) to retain some degree of flexibility, diversity and autonomy; and (d) to provide a buffer against the adverse effects of sudden shifts in government funding. In short, even a modest increment of private support would contribute to the objectives of greater adaptability, excellence and diversity."[16]

---

[15] David A. A. Stager, Focus on Fees — Alternative Policies for University Tuition Fees, (Toronto: Council of Ontario Universities, 1989).

[16] The Commisssion on the Future Development of the Universities of Ontario, Ontario Universities: Options and Futures, (1984), p. 27.

Study Team 1 believes that the college system should undertake a formal assessment of strategies which might be used to increase private-sector donations. This assessment should examine the potential for colleges to raise funds (and donations in kind) individually and cooperatively as a system as a whole. The assessment should pay particular attention to not only the methods employed by other recipients of donations but, also, to the impacts of increasing demands from other sectors (e.g., universities, hospitals, environmental groups ...) for donations and carefully weigh the costs and benefits of a range of strategies. One approach which should be given a full examination is the development of joint training ventures with business and industry sectors. This approach has already yielded some benefits (e.g., Georgian College's links with the automotive sector) and would seem to be particularly well-suited to the colleges given their vocational mandate and the increased emphasis government is placing on the development of partnerships.

The government itself should consider providing increased incentives for joint college-private sector ventures. For example, in addition to the normal operating and capital support which might be generated by students enroled in joint venture training programs, the government might provide a 'bonus' which matches, although not necessarily on a one for one basis, the funds contributed by an industrial or business sector. Also, greater incentives for contributions might be built into taxation policies. At minimum, the government should develop policies and procedures which ensure that private-sector contributions will not adversely affect public-sector support to the colleges.

While private-sector contributions should be encouraged, the initiatives supported by these contributions should not conflict with or detract from the publicly determined mandate of the college system. Thus, in the context of a possible expansion in private-sector contributions, we believe the government and college system should jointly review current fund raising policies to ensure that appropriate safeguards are in place.

▲ 4 **Provincial funding and college expenditures should explicitly recognize the nature of services required by part-time learners and underprepared students entering post-secondary programs.**

The funding of instructional and support services for part-time and underprepared students requires specific attention.

(i) Part-time

It is fast becoming the norm for significant numbers of workers to change jobs and occupations several times over their lifetimes. Given this, and the changing age structure of our population, the demand for instruction on a part-time basis has the potential of increasing at unprecedented rates.[17] But, if a high proportion of this potential demand is to be translated into actual enrolment, the colleges will need to be more responsive to the needs of part-time students. Such responsiveness requires several types of changes, not the least of which are: (a) a shift in college administrators' priorities resulting in part-time learners being treated with the same priority as full-time learners; and (b) government funding policies which facilitate and encourage this reshaping of priorities.

In examining the funding of part-time activity in the college system, Study Team 1 found two areas which require specific attention, namely:

(a) Part-time students undertaking courses during the *day-time* do not generate for the colleges as much grant funding per contact hour as do the full-time students with whom the part-time students are sharing the same classroom. Part-time students generate at least 25 per cent less per contact hour than full-time students. Only part of this difference is offset by a part-time fee which, in relative terms, is higher than the full-time fee. (This differential in grant funding is largely due to part-time day students generating funding as if they are being taught by part-time teachers, who receive less per teaching hour than the full-time teachers.) As a result of the funding differential, part-time students are at a disadvantage when seeking admission to day-time courses.

It is relatively simple to adjust parameters in the funding mechanism to ensure that part-time day students generate the same revenues per contact hour as full-time students. However, it must also be recognized that a full-time student, purchasing several courses at once, provides certain economies of scale (e.g., in terms of administration and scheduling) which a part-time student cannot. Therefore, to ensure

---

[17] Vision 2000, op. cit., p. 35.

equal treatment of part-time and full-time day students, it may be necessary to adjust the parameters such that a part-time, day student generates (on a pro-rated basis) more revenue than a full-time student.

(b) It is our perception that at many colleges, *evening* part-time activities are operated in ways designed to generate 'profits' — profits which are often not re-invested in the part-time area of a college's operation, but instead are used to 'subsidize' full-time programs. As a result of these practices, colleges implicitly place restrictions on the range of services provided to part-time students. These restrictions may not only be in terms of support services provided to part-time students but, also, in terms of flexibility in the scheduling, location and size of heretofore evening classes.

One must ask: "To the extent that (potential) evening part-time students (are offered) receive services which are inadequate or are not comparable with those received by full-time students, how much of this is due to inadequate provincial funding of evening part-time activities? And, how much is due to the internal budgetary practices of colleges, possibly necessitated by inadequate funding of the colleges' full-time programs?" The answer to these questions requires not only a thorough examination of colleges' budgetary practices but, also, the development of provincial policy on the level and nature of services which should be available to part-time learners.

Changes in funding practices, while necessary, will not on their own lead to full equality in treatment of part-time and full-time students. In the national study of part-time education, *The Barriers Project* (1989), college educators stressed that there was an absence of a college culture in which all college staff recognize and take responsibility for the needs of the part-time learner. "Success with full-time clients has blinded decision-makers from full acceptance of the needs of part-time clients."[18] To bring about a change in attitudes is difficult and requires strong support and commitment from the leaders of each college. We believe such support would be more likely to develop if part-time students had a greater voice in college decision-making. (To date, student representation on college boards of governors and on college councils has been almost exclusively from the full-time student body.) Accordingly, representation of part-time students on college boards and councils should be encouraged, possibly through the appointment of external

---

[18] Confederation College, The Barriers Project, (1989), p. 1.

members who have been part-time students or through the election of current part-time students.

(ii) Underprepared Students

We wish here to focus our comments on students who enter post-secondary programs, but are found to be deficient in some basic skill areas (e.g., literacy and numeracy skills). While it is difficult to measure the size of this portion of the college student body, there is growing evidence that a significant number of post-secondary entrants experience serious difficulties in their programs owing to basic skill deficiencies. For example, college teachers report the presence of underprepared students on a regular basis and statistics on college attrition rates and literacy levels of high school and college students[19] lend support to the college teachers' assessments. At Sheridan College (Brampton Campus), for example, a reading test has been administered since 1983/84 to all first year post-secondary students. As of March 1988, of the 4,273 students who had written the test, approximately 40 per cent scored at a grade 10.0 level or below. (Note: these tests were administered on registration day and thus may not represent a normal achievement level for the students.) In the Southam study, Literacy in Canada "A Research Report" (1987), in which functional literacy was defined in terms of tasks that could be successfully completed by literate people, 17 per cent of high school graduates were found to be functional illiterates.

All other factors being equal, changes taking place in secondary school curriculum, and improved links between the secondary school and college systems, should lead to fewer students experiencing difficulties with their college programs. We must, however, also recognize that as post-secondary enrolment rates (per cent of a given age group enroled in university and college post-secondary programs) continue to rise, the likelihood of students experiencing difficulties should increase, *all other factors being equal.* Given what might be viewed in this context as offsetting forces — increasing skill levels of secondary school graduates and increasing post-secondary enrolment rates — we do not expect that the issue of underprepared students will disappear.

---

[19] See Appendix 2, pp. 40-43.

At this time, there is not a clear, explicit statement indicating what the colleges' mandate is with respect to underprepared students. There may be some reluctance on the government's part to explicitly sanction and fund the colleges' provision of preparatory courses to students enroled in the colleges' post-secondary programs. Doing so would be viewed by some as pointing to inadequacies in the secondary school system and by others as debasing college post-secondary programs.

We do not believe either view should be allowed to dominate the policy discussions related to the underprepared student. The first viewpoint does not accurately reflect the performance of our secondary school system. Since 1976/77 the enrolment rate of 19 year olds in our college and university systems has increased 50 per cent, from a rate of 26 per cent in 1976/77 to 39 per cent in 1988/89. With such a large increase, it would have been very surprising if the issue of underprepared students had not arisen in our colleges and universities. In addition, the changing ethnic composition of Ontario's population has meant that for an increasing number of students English is not their first language.[20] With respect to the second viewpoint, rather than debasing college programs, the expansion of remedial course offerings would serve to emphasize the high priority that colleges are giving not only to increasing accessibility but, also, to enhancing the standards and likelihood of success in their post-secondary programs.

The lack of explicit government policy has not meant that these students have been entirely neglected by colleges in the past. Colleges have used 'back-door' means to obtain some funding for remedial courses for post-secondary students. For example, some colleges have assigned two functions to their (funded) General Arts and Science (GAS) programs. The first function is career exploration and general education — the original (and approved) purpose of most GAS programs. The second function relates to remedial and preparatory work, for which colleges have not obtained explicit approval from MCU. However, the lack of explicit funding for underprepared post-secondary students has meant that many colleges do not have in place the necessary assessment and counselling services. Nor have the colleges undertaken to provide the remedial/preparatory courses to the extent these students are thought to require.

---

[20] Vision 2000, op. cit., pp. 22-23.

Who should be responsible for providing them the opportunity to upgrade their basic skills? The secondary school system? the colleges? other groups involved in education?

Study Team 1 believes that the college system's mandate should explicitly direct colleges to provide the necessary assessment, preparatory, and remedial measures for students (i.e., secondary school graduates and mature students) embarking upon college post-secondary programs. There should be clearly defined procedures for obtaining funding for 'post-secondary' students enroled in basic skills courses (e.g., literacy training) and in subject areas which are specified as prerequisites (e.g., chemistry) for a particular post-secondary program. We believe that in most instances, this would represent a better course of action than directing these students to the secondary schools or other educational agencies for upgrading and prerequisite courses. Many students would be reluctant to return to secondary school, and the colleges are in a better position to tailor the courses (in terms of both content and teaching/learning styles) to the post-secondary programs in which these students are enroled.

The allocation of more resources to the training of underprepared students should represent a profitable public investment. Student attrition rates should fall, and pressures to reduce program standards would diminish. Moreover, without further increases in labour force participation rates, the changing demographics will lead to population growth exceeding labour force growth, a pattern which is the opposite to what we have experienced in the last several decades.[21] Future economic growth will depend increasingly on raising the skill levels of our labour force and less on growth in the size of the labour force, which, in turn, will give added importance to measures which increase post-secondary enrolment and completion rates.

▲ 5   *Revenues received by each college from the Provincial government should be stabilized in terms of the funding per student.*

As described earlier, MCU funding per student varied considerably over the period 1978/79 to 1988/89. If, for example, in 1988/89 the college system had been

---

[21] Ibid., p. 48.

funded at the 1978/79 per student level — the peak level during this period — the system's operating grant would have been *23 per cent more* than actually provided. If, however, the system had been funded at the 1982/83 level — the lowest per student level over the period — its 1988/89 grant would have been *17 per cent less* than that actually provided.

This 'roller-coaster' type of existence has taken its toll on the college system. Throughout this ten-year period, the vast majority of qualified applicants gained admission to the college system. However, there is concern that the overall quality of their education suffered not only as a result of the decline in funding per student but, also, as a result of the instability in the funding per student.

In part, this variation in funding per student was the colleges' own doing. They resisted 'managing' enrolment in a manner which would have lessened the variation. One can probably attribute this behaviour in large part to three factors, namely: (a) a strong commitment to maximizing accessibility; (b) the fact that, on the one hand, the number of qualified applicants being turned away can be measured, while, on the other hand, measuring quality and the impacts of different levels of quality are considerably more difficult and subject to a variety of interpretations; and (c) the provincial operating grant is distributed among the colleges on the basis of each college's share of activity (weighted FTE enrolment). Thus, in the absence of agreement among the 22 colleges on target enrolments, there is a natural tendency for each college to maximize its enrolment in an effort to maximize its revenues.

The college system and government should jointly determine an acceptable funding value — acceptable in 'quality' terms — for a weighted FTE student, below which a college should not fall.[22] (The Strategic Planning Committee, proposed in Recommendation 1, above, should be responsible for determining the acceptable level of per student funding, and for revising it as circumstances change.) To ensure that a college's funding per student did not fall below this specified value, changes would need to be made to the existing method of funding. For example, at one extreme, total funding could become 'open-ended' — the government would agree

---

22 In a more technical sense, we should be referring to an acceptable level of expenditure per student, which would take into account that expenditures are supported not only by government operating grants but, also, by other sources such as tuition fees and college reserves.

to, at minimum, fund whatever enrolment a college achieved at the specified per student rate. At another extreme, given a predetermined system operating grant, as is now the case, annual enrolment maxima could be established for each college, such that no college achieving its enrolment ceiling would fall below the agreed upon floor for per student funding. If public resources were more plentiful, the first approach would be relatively simple to implement. But, the expected limitations on the availability of public resources for the college system, combined with the expected increases in demand for places in the college system, lead us to conclude that this approach is not feasible. Some version of the second approach is more realistic, although developing implementation mechanisms will be a fairly complex problem.

What is important from our perspective is the principle that funding per student should not fall below some specified level. Adopting this principle will focus attention on quality and be a step toward ensuring an acceptable level of quality. The downside is that accessibility may, at some time, need to be curtailed.[23] We believe, however, that if qualified applicants are turned away from a quality system, ways will be found to increase the system's revenues, through additional injections of public or private funds or both. "Access without success," which would be much more likely if this funding principle were not adopted, would, in the long run, only lead to less accessibility as both government and students increasingly became disenchanted with the performance of the college system.

For this recommendation to be more fully and effectively implemented, the programs currently funded by the Ministry of Skills Development must be considered. Ideally, it would also be desirable to address programs funded by the federal government, but the political challenge in so doing would be enormous, and for that reason, federal revenues have not been addressed. Because of the cyclical demand for skills training and the current funding mechanisms employed for programs funded through MSD, the problem of unstable program funding exists

---

[23] If some limitations on accessibility were required, these should occur in a planned and possibly selective way. While open to debate, it may, for example, be more appropriate to limit accessibility to the more advanced college programs or very specific vocational training programs, while maintaining accessibility to preparatory and basic programs. In this way one could ensure opportunities for those requiring foundation skills, skills which are necessary if additional skills are to be acquired.

with these programs as well. No long-term commitment to funding exists, and training programs to meet identified governmental priorities are often launched on very short notice, then cancelled or significantly reduced in scope with equally short notice. Recent examples include programming in the areas of Futures and Ontario Basic Skills. This lack of long-range commitment to funding of a specific program, and the tendency to turn programming on and off with extremely short notice, produce the very same problems of instability of funding described in relation to MCU-funded, post-secondary programs. In some ways, the problem is more acute. The option of system-managed enrolment to mitigate the unstable funding is not a strategy that currently can be employed, because these programs are not funded on a formula basis. The college system is totally at the mercy of the vagaries of line account funding for these types of programs. We believe that this problem is equally important to the overall issue of quality, access, and funding, and an improved system of funding these activities should be developed and implemented.

Summary

How to respond to quality - access - funding trade-off(s) is a question which the college system has had to deal with in the past. It is a question which likely will be 'front and centre' in the future. Study Team 1 believes that implementing the recommendations offered here will greatly improve the system's capacity to effectively respond to the trade-offs. The recommendations, while not comprehensive in scope, are meant to begin to address the need to:

- gain a better understanding of the nature of the trade-offs; and to develop system strategies for responding to the trade-offs. (Recommendation #1)

- increase the allocation of resources — public and private — to the college system. (Recommendation #2 and Recommendation #3)

- improve the accessibility of the part-time learner to college programs; and to improve the likelihood of success of underprepared learners embarking upon post-secondary programs. (Recommendation #4)

- bring to the forefront (a) the importance of determining what level of resources is required to provide an acceptable quality of education, and (b) the importance of ensuring that college revenues per student are sufficient to provide this education. (Recommendation #1 and Recommendation #5)

Robert Bernhardt,
formerly of Sheridan College

Ron Chopowick,
Director,
Academic Services,
ACAATO

Ron Golemba,
Faculty,
Centennial College

Drew Nameth,
Manager,
Financial Support Unit,
Ministry of Colleges and Universities

Michel Parent,
Administrator,
French Language Services,
Niagara College

Robert Struthers,
Dean,
Continuing Education and Marketing,
George Brown College

Ralph Wood,
Faculty,
Sir Sandford Fleming College

Helen Burstyn,
Deputy Secretary,
Premier's Council Secretariat

Peter Dawson,
Member,
Council of Regents

C.Y. Hsu,
Senior Analyst,
Labour Market Research,
Ministry of Skills Development

Karen O'Kain,
Senior Policy Advisor,
Research Support & International
Activities Branch

Howard Rundle,
Chair,
Fanshawe College

Brian Wolfe,
Executive Officer,
Ontario Council of Regents

Herb Young,
Former President,
Loyalist College

Appendix 2: The College System—An Empirical Snapshot

Table of Contents

[†] Numbers in brackets represent the original number assigned to this miniproject

1. College Students

Statistical Profile of Full-Time, Post-Secondary, College Students (Project #1)

- Full-time post-secondary (FTPS) students account for about 58 per cent of total full-time equivalent enrolment in the college system. Skills training sponsored by the Federal government and the Ontario Ministry of Skills Development accounts for another 27 per cent of total enrolment, while the remaining 15 per cent consists of students studying on a part-time basis.

- System-wide data on student characteristics (e.g., education, age, and last activity prior to enroling in college) is available for full-time post-secondary students but not for other types of students.

Gender and Age

- Females in 1987 accounted for about 54 per cent of FTPS enrolment; this figure has increased by about 2 percentage points since 1976. Females aged 17-19 are almost 50 per cent more likely to be enroled in college than their male counterparts.

Participation Rates (per cent of Selected Population Enroled as FTPS Students) by Age and Gender, 1987

Age	Male	Female
17-19	6.3	9.4
20-24	5.4	5.1
25-29	0.8	0.9
30-34	0.3	0.6
35+	0.1	0.1

- Between 1976 and 1987 the participation rate of 17-19 year olds increased 36.4 per cent; and the participation rate of 20-24 year olds increased 72.1 per cent, while the participation rate of those aged 25 and over increased by more than 100 per cent.

- The average age of FTPS students is rising. In 1976, those aged 20 and over accounted for 52 per cent of FTPS enrolment; by 1987, this figure had risen to almost 64 per cent.

Distribution (%) of FTPS College Students by Selected Age Groups

Age	1976	1987
17-19	48.0	36.2
20-24	41.6	47.3
25+	10.3	16.4
Total	100.0	100.0

Educational Background of FTPS Students

- In 1987, 64 per cent of FTPS students had completed Grade 12 or part of Grade 13; 15 per cent had completed Grade 13 and 14 per cent had completed or had some other post-secondary education (those with a university background accounted for about one-half of this latter group).

- The proportion of college students with Grade 13 as their highest previous level of educational attainment decreased almost 4 percentage points between 1976 and 1987, while the proportion with Grade 12 or part of Grade 13 increased 3 percentage points over this period.

Latest Previous Activity of FTPS Students

- In 1987, 65 per cent of college students had been full-time students immediately prior to enroling in college and another 27 per cent had been in the labour force. In 1976, the comparable figures were 68 per cent and 26 per cent, respectively.

Distance of FTPS Students from 'Home'

- In each year over the period 1976 to 1986, about one-third of college students reported a permanent address which was more than 25 miles from the campus they were attending.

Colleges, Socio-economic Status, and Occupational Attainment

- Anisef, Ashbury, and Turrittin in their Ontario study, "Educational Diversity and Occupational Attainment: Are Community Colleges Fulfilling their Promise?," find that:

  "Persons choosing to enter universities or community colleges are different with respect to personal and socio-economic origins. College students are lower in socio-economic status, live in more rural parts of Ontario and come from larger families. University students enter with higher secondary school grades, are bolstered by more encouragement from family and non-family members to pursue studies beyond high school, are more confident of their academic abilities, and develop higher educational and occupational expectations while in their formative high school years."

  "Average job status score differences between university and college entrants appear to grow larger as one moves from earlier to later stages of career attainment. This increasing gap in job status returns would appear to support the class reproduction perspective offered by radical sociologists, the argument that post-secondary institutions serve to sort their students into particular levels of the class structure."

  "While Canadian community colleges may provide a mechanism for transmitting intergenerational inequalities based on class, our analysis demonstrates that the present job status returns to female college entrants are more favourable than to their university counterparts. What we have here are post-secondary educational institutions that recruit particular populations, populations which are not passive recipients of educational programs, but which participate in selection in ways that often affirm traditional and differential gender and class expectations regarding education and occupational goals. In the process some social and occupational mobility both upward and downward is possible."

Related Background Documents Available at Council of Regents

College Affairs Branch, Ontario Ministry of Colleges and Universities, <u>Statistical Profile of Ontario Colleges of Applied Arts and Technology</u>, 1989.

Paul Anisef, Fredrick D. Ashbury, and Anton H. Turrittin, "Educational Diversity and Occupational Attainment: Are Community Colleges Fulfilling their Promise?," 1989.

Determinants of College Participation Rates in Ontario (Project #2)

Findings

- There is considerable uncertainty about the future levels of college post-secondary enrolment. On the one hand, the population aged 17-24 will decrease in number by almost 10 per cent between 1987 and 2000; and almost 85 per cent of the students in college post-secondary programs fall within this age range. On the other hand, age-specific participation rates (the percentage of a given age group enroling in college) have varied considerably over time, with the long-term trend being upward; in recent years, however, participation rates of 17-24 year olds have stabilized or even decreased slightly. In addition, between 1987 and 2000, the population aged 25-54 is projected to increase by almost 1,000,000 or 25 per cent, and the participation rate of this group has been increasing.

- While population projections to the year 2000 of those 17 and over are fairly reliable in that future members of this group have already been born, projections of their college participation rates are much more problematic. In an effort to gain some insight into future enrolment trends, David Foot, of the University of Toronto, was asked to undertake an analysis of factors affecting college participation rates and then, if appropriate, to use the results of the analysis to project full-time, college post-secondary enrolment to the year 2000.

- Foot and MacNiven estimated the impact on college participation rates of changes in: (i) real personal disposable income per capita; (ii) real college fees; and (iii) unemployment rates. Economic theory suggests that *increases* in:

  - Real per capita income will *increase* the demand for education; increases in real per capita income increase the individual's ability to finance educational expenditures and also may indicate that the returns to investments in education are increasing.

  - Real student fees will *decrease* the demand for education because such increases raise the relative price of education or the costs of the educational investment.

  - Unemployment rates, all other things being equal, will *increase* the demand for education because higher unemployment rates reduce the opportunity costs of education.

- Their estimation results, based on analyses of historical data covering the periods 1968 to 1987 and 1977 to 1987, are statistically significant and strongly support the economic theories underlying the explanatory model of participation rates described above. In addition, the results indicate that college enrolment is very responsive to income changes, with the elasticity increasing with age; enrolment is, on the other hand, not very responsive to fee changes, with younger students, however, being more responsive to fee changes than older students. The unemployment rate's impact on enrolment, while also statistically significant, does not appear to differ much from one age group to another. Overall the results suggest that the medium to long term trend in participation rates is strongly influenced by the trend in real per capita income, while year to year fluctuations in participation rates about the long run trend are affected by unemployment rates.

- With these results, Foot and MacNiven proceed to project participation rates to the year 2000, using projections of the explanatory variables and the estimated impacts of changes in these explanatory variables on participation rates. In terms of the explanatory variables it is assumed (projected) that: (i) real personal disposable income per capita will, on average, increase 1.1 per cent annually during the 1990s (between 1967 and 1987 average annual growth was 2.6 per cent and during the 1980s it has averaged 1.6 per cent); (ii) *real* college fees will remain at the current level; and (iii) a gradual decline in unemployment rates of approximately 3 percentage points will occur over the 1990s. The per capita income and unemployment rate projections, supplied to Foot by the University of Toronto, essentially describe a "macroeconomy that grows through the early 1990s, suffers a mild growth 'pause' in 1992 and thereafter grows steadily at a somewhat slower rate." (Foot/MacNiven, p. 24)

- Given the projections of the explanatory variables, Foot and MacNiven find that participation rates will increase throughout the projection period, with the exception of 1992.

College Participation Rates by Age Group and Sex: 1988 Actual and 2000 Projected

Year	17-19 Males	17-19 Females	20-24 Males (%)	20-24 Females	25+ Males	25+ Females
1988	6.18	9.22	5.30	5.02	0.20	0.29
2000	7.53	10.56	7.43	7.14	0.35	0.44

- In turn, the projections of participation rates when combined with demographic projections yield the enrolment projections labelled 'Foot' in the following table. For comparative purposes 'Bench-mark' projections have been included in this table; the Bench-mark projections assume that age-specific participation rates will remain at their current (1988) levels throughout the projection period and thus reflect solely the impact of changing demographics. Both sets of projections use a common set of population projections (i.e., the Ontario Ministry of Treasury and Economics 'reference scenario').

Full-Time, Post-Secondary College Enrolment Projections, 1989-2000

Year	Bench-mark Projection	% Change	Foot Projection	% Change
(Actual) 1988	95043	-	95043	-
1989	95857	0.9	94732	-0.3
1990	96008	0.2	95328	0.6
1991	95088	-1.0	92766	-2.7
1992	93721	-1.4	91796	-1.0
1993	92703	-1.1	95414	3.9
1994	92060	-0.7	97926	2.6
1995	91346	-0.8	99093	1.2
1996	90509	-0.9	101584	2.5
1997	90042	-0.5	106078	4.4
1998	90068	0.0	111772	5.4
1999	90503	0.5	117316	5.0
2000	90987	0.5	123545	5.3

- Both sets of projections show fairly stable enrolment in the early years of the projection period, although enrolment by 1992 is projected to be less than in 1988. Beginning in 1993 the two sets of projections move in quite different directions. The Bench-mark projections show moderate enrolment declines, with enrolment in the year 2000 being almost 3 per cent less than in 1992. The Foot/MacNiven projections show significant enrolment increases, with enrolment in the year 2000 being almost 35 per cent more than in 1992.

Issues/Implications

- Foot and MacNiven caution the reader that these increases in participation rates may not occur if the projected growth in the economy does not occur and, most importantly, if colleges do not respond adequately to the needs of the 'older' (25+) student. This population group is projected to contribute

about one-half the increase in total enrolment, with their share of college post-secondary enrolment projected to increase from 17 per cent in 1988 to 25 per cent in 2000.

• In concluding their paper, Foot and MacNiven state: "This educational challenge of an aging society will need to be a cornerstone of the community college system in Ontario if it is to realize the full potential of the educational demands reviewed in this study." (p. 28)

Related Background Documents Available at Council of Regents

David Foot and Maia MacNiven, "The Determinants of Enrolment Rates and Enrolments in Ontario Community Colleges," in Some Empirical Features of the College System. Background Papers, (Toronto: Ontario Council of Regents), 1990.

Continuing Education Students: Profiles and Trends (Project #4)

Part-Time Enrolment Growth

Part-Time Enrolment as a Percentage of Total Enrolment, 1983/84 to 1987/88

* Estimate
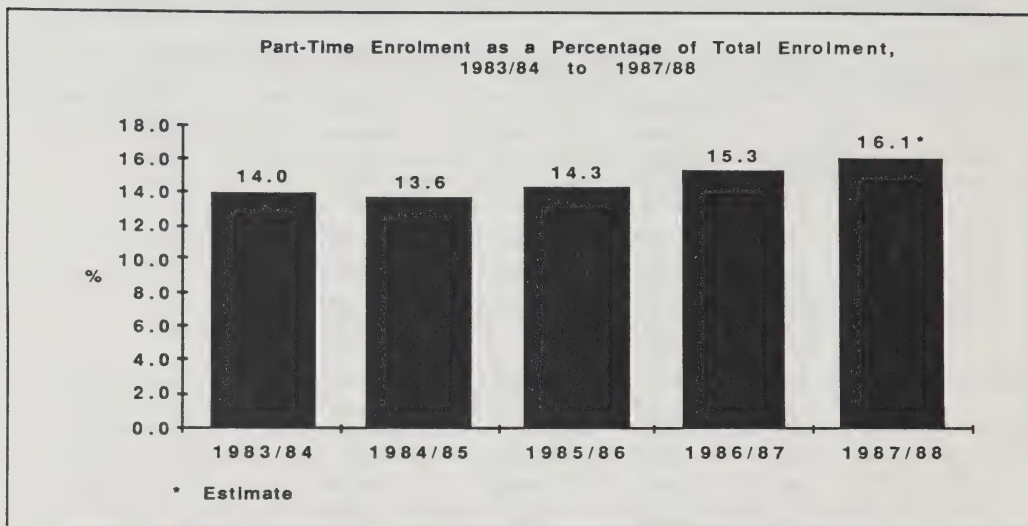
Source: College Affairs Branch, Ministry of Colleges and Universities

• The 1980s have witnessed growth spurts in both full- and part-time college enrolment. However, the growth rate of part-time enrolment has been larger than that of other major enrolment categories; for example, from 1979 to 1986, full-time post-secondary activity grew 33 per cent, while part-time activity grew 54 per cent.

• In 1987-88, part-time activity constituted 16.1 per cent of total college full-time equivalent enrolment, while in 1983-84 it accounted for 14 per cent of total enrolment.

• When part-time activity is broken down, one finds that non-funded activity (general interest courses and vocational courses for which an external organization controls the entry of students and/or the course completion standards) grew 28 per cent between 1979 and 1986 , while funded part-time activity (vocational courses for which the college controls the 'entry and exit' of students) grew 64 per cent. Non-funded part-time enrolment accounted for about 22 per cent of total part-time enrolment in 1987-88.

- Four major trends in enrolment activity are noted:
    - Full-time post-secondary growth has stabilized in the latter half of the decade.
    - Part-time funded activity has demonstrated continued yearly high growth levels.
    - Part-time non-funded activity, which exhibited large growth in the early 1980s, has been increasing only moderately in recent years.
    - Regional shares of part-time funded activity have been quite stable during the 1980s, with the one exception being the Northern region. In 1980-81 the Northern region accounted for 9.1 per cent of provincial part-time funded activity; by 1987-88 its share had fallen to 7.6 per cent.

General Profile of Part-Time Students at the Colleges

- The typical part-time student could be male or female (almost equal probability), would be in the 25 to 44 age range and would most likely be taking vocational courses. Participation in part-time activity tends to be higher, the higher one's educational attainment.

Barriers to Part-Time Learning

- One of the barriers most often cited by students is the general lack of time to participate in part-time learning. The pressures exerted by a number of situational circumstances (family, work, recreational, etc.) prevent many students from enroling or fully enjoying their studies. College administrators perceive that students face institutional barriers such as class scheduling, course length, and length of time to complete a certificate program.

Exceptional Practices Occurring in the College System

- Several types of activities/teaching modes have been designed in an effort to better meet part-time learner needs, including: the Durham Alliance for Training and Education in which a consortium of four post-secondary institutions (three universities and Durham College) have formed a partnership to allow the offering of a broader range of courses in Durham's area and the transferring of credits among the institutions; the offering of university courses at college sites; the use of distance education delivery modes; the targeting of certain groups (e.g., seniors); the scheduling of courses to meet the needs of shift workers; the provision of facilities such as student lounges; and convocations and newsletters.

Issues/Implications

- Between 1987 and 2000, the population aged 25-54 is projected to increase 25 per cent. Thus, even without increases in participation rates, one can expect significant increases in the demand for part-time courses. Will the colleges have sufficient physical space to meet the demand, particularly the demand for instruction in the traditional evening hours? Will colleges be able to find ways to provide part-time instruction in 'non-traditional' hours to meet the needs of, for example, shift workers and employed parents with young children? If yes, participation rates may increase significantly, further increasing part-time enrolment.

- If resources (e.g., space) constrain the ability of colleges to meet part-time demand, should colleges restrict their general interest courses to permit the offering of more vocational courses?

- How can (should) a student's life experiences be translated into academic credit?

- What kinds and quality of services/courses will part-time students expect or demand? Is the content of part-time courses currently geared to the needs of adult learners or is it patterned after that developed for the 18 year old day student attending college? Should the content, method of presentation be different?

- Should there be parity between part-time and full-time fees or should part-time fees be increased relative to full-time fees?

- If pay equity between part-time and full-time teachers is achieved, who will (should) bear the costs — the part-time student, the tax-payer, both?

- Is there a need to clearly define the respective roles of high schools, colleges, and universities in the area of continuing education? Or, have, in some sense, their roles been 'naturally' defined over time, resulting in both good access and little wasteful competition?

- Does a partnership such as the Durham Alliance provide a good model for enhancing accessibility in locations not served by the full range of post-secondary institutions?

Related Background Documents Available at Council of Regents

Teresa Karolewski, Vision Miniproject #4 - Continuing Education in Ontario's Colleges: Student Profiles, Barriers and Exceptional Practices, 1989.

Geographic Mobility of Full-Time, Post-Secondary, College Students (Project #6)

Findings

- One-third of college students, or about 31,000 students, are attending a college campus which is more than 25 miles from their permanent address (see Table 1). There was little variation in this figure over the period 1976 to 1986. Up to 3,000 of these students are students from outside Ontario, with as many as 1,200 being from Quebec.

- Colleges with the **highest** percentage of enrolment consisting of students with a permanent address more than 25 miles from campus are: S.S. Fleming (66 per cent); Georgian (63 per cent); Canadore (54 per cent); and Northern (52 per cent). In the case of S.S. Fleming College, the presence of the highly specialized Frost Campus in Lindsay (mainly natural resource programs) contributes to the high percentage of 'non-local' enrolment.

- Colleges with the **lowest** percentage are: Niagara (18 per cent); Centennial (20 per cent); St. Clair (20 per cent); Durham (21 per cent); Seneca (23 per cent); and George Brown (24 per cent).

- For the most part, colleges in the North have a relatively high percentage of enrolment consisting of students with a permanent address more than 25 miles from campus. This is largely due to the greater distances residents of the North live from a college campus and not due so much to students moving into the North to attend college. A relatively low percentage of enrolment at Metro Toronto colleges consists of students with a permanent address more than 25 miles from campus.

- Nevertheless, a significant percentage of students from outside the Toronto area attend a Toronto area college (Centennial, George Brown, Humber, Seneca, Sheridan). With the exception of students from the Ottawa-Kingston area, at least 5 per cent of each county's college students attend a Toronto area college (see Table 2.)

Table 1
College Students With Permanent Address More Than 25 Miles From Campus

College	Location	1986 Enrolment	# and % of Students with Permanent Address > 25 Miles from Campus	
			#	%
Algonquin	Ottawa	8,199	3,069	37.4
Cambrian	Sudbury	2,699	998	37.0
Canadore	North Bay	2,078	1,127	54.2
Centennial	Scarborough	6,480	1,280	19.8
Conestoga	Kitchener	3,470	1,025	29.5
Confederation	Thunder Bay	2,398	1,072	44.7
Durham	Oshawa	2,588	554	21.4
Fanshawe	London	5,920	2,877	48.6
George Brown	Toronto	6,369	1,512	23.7
Georgian	Barrie	2,404	1,588	66.1
	Orillia	567	331	58.4
	Owen Sound	388	184	47.4
	(Total)	3,359	2,103	62.6
Humber	Etobicoke	7,194	2,152	29.9
Lambton	Sarnia	1,166	330	28.3
Loyalist	Belleville	2,125	1,000	47.1
Mohawk	Hamilton	6,357	1,727	27.2
Niagara	Welland	3,368	616	18.3
Northern	South Porcupine	665	298	44.8
	Kirkland Lake	387	207	53.5
	Kapuskasing	59	14	23.7
	Moosonee	69	69	100.0
	Haileybury	114	88	77.2
	(Total)	1,294	676	52.2
St. Clair	Windsor	3,101	570	18.4
	Chatham	530	153	28.9
	(Total)	3,631	723	19.9
St. Lawrence	Brockville	594	228	38.4
	Kingston	2,230	878	39.4
	Cornwall	980	349	35.6
	(Total)	3,804	1,455	38.2
Sault	Sault Ste. Marie	1,374	571	41.6
Seneca	North York	9,007	2,042	22.7
Sheridan	Oakville	6,425	1,775	27.6
S.S. Fleming	Peterborough	2,329	1,242	53.3
	Lindsay	1,194	1,098	92.0
	(Total)	3,523	2,340	66.4
	System Total	**92,828**	**31,024**	33.4

Source: College Affairs Branch, MCU, Statistical Profile of Ontario Colleges of Applied Arts and Technology, 1989.

Table 2
Proportion of Each County's Students Enrolled at Selected Colleges, 1987

County	Primary College*	% of County's Students Attending Primary Colleges	% of County's Students Attending 5 Toronto Colleges**	% of County's Students Attending Remaining Colleges	Total
North					
Algoma	Sault	54.1	10.2	35.7	100.0
Cochrane	Northern	49.2	6.9	43.9	100.0
Kenora	Confed.	70.1	7.0	22.9	100.0
Manitoulin	Cambrian	70.4	9.3	20.3	100.0
Nipissing	Canadore	65.4	5.9	28.7	100.0
Parry Sound	Canadore	31.4	21.0	47.6	100.0
Rainy River	Confed.	71.0	6.4	22.6	100.0
Sudbury	Cambrian	52.5	7.0	40.5	100.0
Sudbury R. M.	Cambrian	75.2	7.1	17.7	100.0
Thunder Bay	Confed.	82.8	5.8	11.4	100.0
Timiskaming	Northern	44.1	8.0	47.9	100.0
East					
Frontenac	St. Lawrence	78.5	4.3	17.2	100.0
Lanark	St. Lawrence	35.3	9.4	55.3	100.0
Leeds/Gren	St. Lawrence	60.8	5.8	33.4	100.0
Lennox/Add	St. Lawrence	45.3	6.3	48.4	100.0
Ottawa/Carl	Algonquin	89.1	4.3	6.6	100.0
Prescott/Russ	Algonquin	64.0	2.4	33.6	100.0
Renfrew	Algonquin	54.8	8.6	36.6	100.0
Stor/Dun/Glen	St. Lawrence	66.1	5.0	28.9	100.0
Southwest					
Elgin	Fanshawe	57.6	12.2	30.2	100.0
Essex	St. Clair	86.2	5.1	8.7	100.0
Huron	Fanshawe	33.6	14.2	52.2	100.0
Kent	St. Clair	49.4	8.5	42.1	100.0
Lambton	Lambton	58.0	7.8	34.2	100.0
Middlesex	Fanshawe	77.8	8.0	14.2	100.0
Oxford	Fanshawe	45.7	16.5	37.8	100.0
Perth	Fanshawe	36.8	16.0	47.2	100.0
Waterloo	Conestoga	64.0	17.7	18.3	100.0
Wellington	Conestoga	41.4	31.5	27.1	100.0
Niagara					
Brant	Mohawk	49.4	19.3	31.3	100.0
Hald/Nor	Mohawk	37.6	24.4	38.0	100.0
Niagara	Niagara	61.7	15.7	22.6	100.0
Wentworth	Mohawk	74.0	17.2	8.8	100.0
E. Central					
Durham	Durham	59.4	27.0	13.6	100.0
Haliburton	S.S. Fleming	39.7	38.4	21.9	100.0

	Primary College*	% of County's Students Attending Primary Colleges	% of County's Students Attending 5 Toronto Colleges**	% of County's Students Attending Remaining Colleges	Total
County					
Hastings	Loyalist	67.0	8.3	24.7	100.0
Northumber	S.S. Fleming	28.3	19.7	52.0	100.0
Peterborough	S.S. Fleming	76.5	10.6	12.9	100.0
Princ Edward	Loyalist	57.8	13.9	28.3	100.0
Victoria	S.S.Fleming	56.4	16.7	26.9	100.0
Central					
Bruce	Georgian	34.9	19.5	45.6	100.0
Grey	Georgian	39.0	29.6	31.4	100.0
Muskoka	Georgian	38.5	30.7	30.8	100.0
Simcoe	Georgian	63.4	24.7	11.9	100.0
Toronto					
Dufferin	Sheridan	31.9	64.6	35.4	100.0
Halton	Sheridan	54.7	72.2	27.8	100.0
Metro Toronto	Seneca	34.8	96.1	3.9	100.0
Peel	Sheridan	51.9	94.0	6.0	100.0
York R. M.	Seneca	47.7	90.1	9.9	100.0
System Total			38.5		

... Table 2 continued

* The primary college is the one attended by the largest percentage of students.
** The five Toronto colleges are: Centennial, George Brown, Humber, Seneca, and Sheridan.
Source: Nicholas Yarmoshuk, <u>Geographical Mobility of Ontario College Students, 1983-87</u>, 1989.

% of County's Students Attending a Toronto Area College	Number of Counties
< 5.0	3
5.0 to 9.9	19
10.0 to 14.9	5
15.0 to 19.9	9
20.0 to 24.9	3
25.0 to 29.4	2
30.0 to 34.9	1
>35	6

- About 95 per cent of students from Peel, York R.M., and Metro Toronto attend a Metro Toronto college.

- Students from certain areas in the north appear to enrol in disproportionate numbers at Algonquin College in Ottawa. For example, 11 per cent of students originating from the Cochrane area attended Algonquin in 1987.

Issues/Implications

- While the data do no not allow one to determine what proportion of the students attending a campus more than 25 miles from their permanent address are commuting from their permanent address and what proportion have actually moved in order to attend college, it would appear that there are significant numbers of students who move when attending college.

- College students display greater geographic mobility in terms of their selection of college than one might have expected given the emphasis placed on 'community' when colleges first opened.

- The mobility of students would appear to be affected by factors such as: i) the 'attraction' of Toronto, in terms of future employment prospects, range of programs available, and the city itself ; (ii) the 'uniqueness' of certain programs offered at some colleges; and (iii) the availability of instruction in the French language.

- Recent decisions by several colleges to build student residences should increase the geographic mobility of college students

Related Background Documents Available at Council of Regents

Nicholas Yarmoshuk, Geographical Mobility of Ontario College Students, 1983-87, Sir Sandford Fleming College of Applied Arts and Technology, 1989.
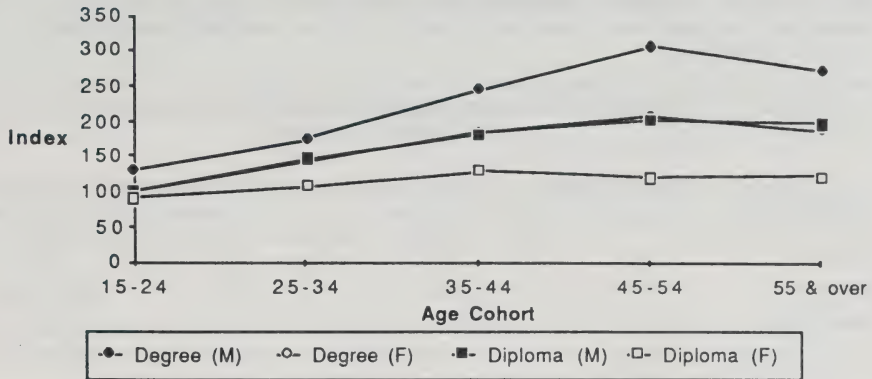
Employment of College Graduates: A Comparison of College and University Graduates' Earnings and Employment in Ontario (Project #18)

Findings

- The chart shows the age-earnings curve of college and university graduates by sex and reflects the commonly held notion that both sex and educational attainment affect earnings. The chart is based on earnings data of full-year, full-time workers in 1987.

- Male university graduates have higher starting salaries than other graduates and the difference increases with age until about age 55. Males with college diplomas and females with university degrees have very similar age-earnings profiles; for those less than 25 years old, members of both groups tend to earn about 77 per cent of that of their university male counterparts; in the age range 45 to 54 they earn about 66 per cent. Females with college diplomas have the lowest earnings upon graduation and their earnings exhibit the least growth with age; female college graduates under 25 years old earn about 70 per cent of that of male university graduates of comparable age; in the age range 45-54 the comparable figure is 40 per cent.

Index of Earnings of University (Degree) and College (Diploma) Graduates by Sex, 1987

Index

350				
300				
250				
200				
150				
100				
50				
0				
15-24	25-34	35-44	45-54	55 & over

Age Cohort

-●- Degree (M)   -○- Degree (F)   -■- Diploma (M)   -□- Diploma (F)

Source: Statistics Canada, Household Survey Division, Survey of Consumer Finances, 1988, unpublished data.

• 14 per cent of 1982 college graduates who were working in 1987 held jobs which were unrelated to their area of study; for university graduates at the bachelor degree level the comparable figure was 13 per cent. While these figures are very similar, the data indicate that college graduates are more likely (almost 50 per cent more likely) to find directly related employment within the first year or two after graduation than university graduates.

Issues/Implications

• College graduates appear to do quite well in terms of employment and earnings immediately upon graduation. However, relative to university graduates, college graduates do not experience as much growth in earnings over their careers. This slower growth may in part be due to the fact that certain occupations are necessarily characterized by fewer opportunities for career advancement and these may be occupations for which colleges are the main suppliers of trained labour. It may also be the case, however, that college graduates, on average, are not viewed by employers as being as suitable as university graduates for on-the-job training investments.

• As we enter the 21st century, the increasing scarcity of labour, combined with changing/advancing methods of production, will likely mean that employers will be increasingly seeking employees who 'know how to learn.' If this occurs and if college graduates are not viewed as good risks for on-the-job training investments, then the earnings differentials between college and university graduates may further widen, and real economic growth will be less than it might have been.

Related Background Documents Available at Council of Regents

Craig McFadyen, Vision 2000 Miniproject #18 - The Employment of College Graduates: A Comparison of College and University Graduates' Earnings and Employment in Ontario, 1989.

Post-Secondary Student Attrition in Ontario's College System (Project #17)

Findings

- Attrition rates for those entering the college system from 1976 to 1984 were examined. The attrition rates of the 1982 college entry cohort which are shown in the following table are typical of the rates throughout this period.

Attrition Rates by Division and Duration of Program
Fall, 1982, Entry Cohort

	1 Year Programs	2 Year Programs	3 Year Programs	Total
Applied Arts	35.1	40.6	54.7	43.5
Business	30.4	45.1	47.6	44.4
Health	18.4	22.7	22.9	21.8
Technology	23.6	46.1	46.6	45.6
Total	26.8	42.8	44.0	41.7

Source: Ontario College Information System

- For those entering the college system during the period 1976 to 1984, it is estimated that 43 per cent did not graduate, at least not before December, 1988.

- Attrition tended to be higher among:

  - Males

    Males were 40 per cent more likely to withdraw than females.

  - Those who have not completed Grade 13

    Grade 12 graduates were 39 per cent more likely to withdraw than Grade 13 graduates

  - Those attending larger colleges

    Students attending larger colleges were about 10 per cent more likely to withdraw than students attending smaller colleges.

  - Those enroled in applied arts, business, and technology programs (i.e., non-health science programs)

    Students in these divisions were twice as likely to withdraw as students in health sciences.

  - Those enroled in two and three year programs

    Attrition rates for students in two and three year programs tended to be about 60 per cent higher than for students in one year programs.

  - Those in their first year of studies

    For students in two year programs, 72 per cent of withdrawals occurred prior to second year; for students in three year programs about 60 per cent of withdrawals occurred prior to second year.

  - Those students with at least one parent with some post-secondary education

    Attrition rates of students with parent(s) with post-secondary education tended to be higher than those of students from families with no post-secondary education, although

the amount by which these rates differed from one cohort to another varied considerably, and in some years the difference was relatively insignificant.

Note: These findings, taken from the study (1983) of R. A. Stoll and E. Scarff on student attrition in Ontario's colleges, while suggestive, should not be used to draw explicit conclusions about the causes of attrition.

- Attrition rates in the Ontario college system appear to be comparable to those in the United States, where college attrition rates typically fall within the range of 45 to 50 per cent. (See Stoll and Scarff study.)

- While there is not a definitive study of the causes of attrition in Ontario's colleges, academic 'underpreparedness' of students was cited as a major factor contributing to attrition in an ACCATO survey (1988) of student retention strategies of Ontario's colleges.

Issues/Implications

- While attrition rates in Ontario may be no higher than those in other jurisdictions and not all attrition should be viewed as 'bad,' several issues arise given the high rates of attrition, namely:

  - Can attrition rates be lowered in a cost-effective manner without resorting to increases in admission standards? If no, should accessibility (entry to college programs) be sacrificed (limited) in the name of 'efficiency?'

  - Assuming attrition rates can be reduced in a cost-effective manner without reducing accessibility, what are the **key** elements of an attrition reduction strategy?

    - greater articulation between colleges and secondary schools?
    - more remedial and preparatory programs in the colleges?
    - more counselling services in the colleges?
    - other elements?

  - What explains the lower rates of attrition in Health Science programs?

    - enrolment quotas in Health Science programs resulting in higher admission standards?
    - occupational specificity of training?
    - other factors?

Related Background Documents Available at Council of Regents

Howard Rundle, Vision 2000 Miniproject #17 - Student Attrition in the College System, 1989.

George Radwanski, Ontario Study of the Relevance of Education, and the Issue of Dropouts, Ontario Ministry of Education, 1988.

R. A. Stoll and E. Scarff, Student Attrition from Post-Secondary Programs at the Ontario Colleges of Applied Arts and Technology, Ontario Ministry of Colleges and Universities, March, 1983.

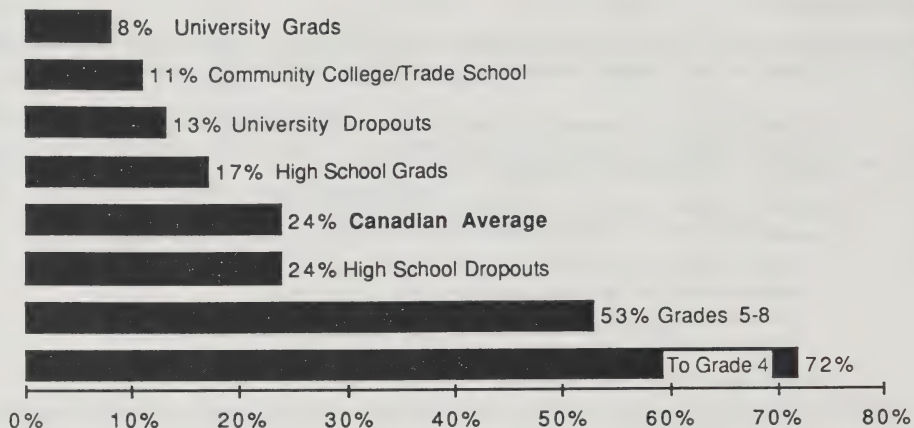Survey of Student Retention Strategies, ACCATO, 1988.

Literacy and the Colleges (Project #28)

Findings

- The Southam News study, Literacy in Canada " A Research Report" (1987), concluded that one in six working Canadians is functionally illiterate, and 17 per cent of high school graduates are functional illiterates.

- Immigrants to Canada are more likely to be illiterate (35 per cent) than native-born Canadians (22 per cent). However, the first generation offspring of Canadian immigrants achieve literacy levels similar to or better than second and subsequent generations of Canadians. (Southam)

Functional Illiteracy Rates by Educational Attainment, Canada

8%	University Grads
11%	Community College/Trade School
13%	University Dropouts
17%	High School Grads
24%	**Canadian Average**
24%	High School Dropouts
53%	Grades 5-8
To Grade 4 72%	

0%   10%   20%   30%   40%   50%   60%   70%   80%

Source: The Creative Research Group

- While a systematic study of literacy levels of entrants to college post-secondary programs has not been undertaken, increasingly colleges are indicating that a significant number of entrants have less than adequate literacy skills.

- Currently MCU does not fund colleges for a specific preparatory semester for post-secondary students who lack the basic literacy and numeracy skills required to complete their programs.

- In the fall of 1986 the Government of Ontario launched its Plan for Adult Basic Literacy in which it encouraged four ministries (MSD, MCU, MOE, and Citizenship and Culture) to work together in boosting Ontario's literacy level. However, concerns have been expressed that competition for scarce funds has limited the extent to which these agencies and others are able (willing) to cooperate, and better coordination of efforts remains elusive.

Issues/Implications

- Should colleges as a matter of course administer literacy and numeracy tests to post-secondary applicants? Would, for example, new immigrants view such tests as being discriminatory?

- What should be the colleges response to applicants to post-secondary programs who do not possess the necessary literacy and numeracy skills, particularly if these applicants are high school graduates? Should the colleges offer admission conditional on the student upgrading these skills or should the offer be unconditional?

- From where should college students/applicants requiring assistance seek assistance? Should it be the colleges who provide remedial programs? The high schools? Voluntary organizations?

- If colleges were to provide remedial literacy and numeracy programs to high school graduates who have applied for admission to post-secondary programs, what would be the resource requirements?

- In addition to post-secondary students, what should be the role, if any, of colleges in literacy and numeracy training of adults? Should it extend beyond ESL programs?

Related Background Documents Available at Council of Regents

Bob Bernhardt, Vision 2000 Miniproject #28 - Literacy and Numeracy Skills of Students Entering College Programs, 1989.

Colleges and Special Needs Students (Project #11)

Findings

- Section 15 of the Canadian Charter of Rights and Freedoms and the Ontario Human Rights Code (Sections 10, 16, and 23) ensure the rights of all citizens as fully enfranchised members of society; and by the introduction of Bill 82 (the Education Amendment Act), the Government of Ontario has provided legislation designed to increase access by exceptional students to publicly-funded secondary school education in Ontario.

- Since the enactment of Bill 82 in 1985, there has been a significant increase (more than 20 per cent) in the number of public secondary school students *identified* as being exceptional. Of the roughly 20,000 exceptional pupils, aged 16 to 20, attending public secondary schools in Ontario in 1988, almost 50 per cent were learning disabled; about 20 per cent were gifted; 18 per cent were educable retarded; and 9 per cent were behavioural; the remaining students were identified as being autistic, hearing impaired, speech and language impaired, visually impaired, orthopedic, or multiple handicapped.

Enrolment in Ontario Public Secondary Schools by Selected Areas of Exceptionality, Age Group 16 to 20, 1982 to 1988
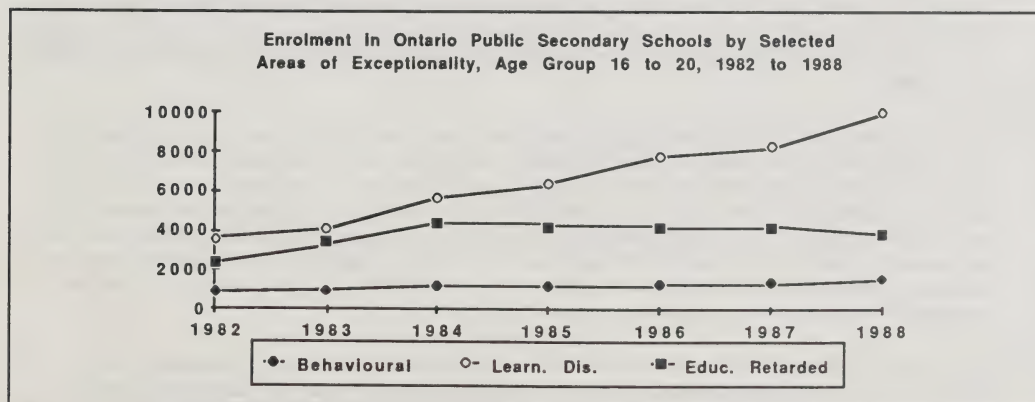
Source: Table 4.80, Secondary School September Report

- While applications from exceptional students for places in the college system undoubtedly will increase, the impacts of Bill 82 and other factors on this demand are difficult to forecast with any precision. Demand for college places will be influenced by the range of college programs and support services which are readily accessible to special needs students and the range of services provided by other suppliers of training.

- The barriers to access most frequently identified by special needs students are physical and negative attitudes. In addition, financial and program delivery barriers are experienced. Physical barriers range from the lack of ramps or elevators to the absence of devices for access of the visually and hearing impaired. As well, limited availability of human resources such as counsellors, tutors, and interpreters decreases access. Lack of awareness by educational staff of the needs of exceptional students and of teaching strategies for meeting these needs adversely affect their attitude toward special needs students. Financial barriers for special needs students seem to range from simply inadequate student assistance in total (particularly for special needs students attending on a part-time basis) to lengthy time delays in approval of applications for assistance to the multiplicity of government departments who may be involved in providing one form of assistance or another. Program delivery barriers include a lack of availability of part-time programs or more generally a lack of programs which permit students to proceed at a pace appropriate to their capabilities, and a lack of flexibility in examination methods.

- The college system and the government are making efforts to reduce some of these barriers. For example, the College Committee on Special Needs in cooperation with the Association of Colleges of Applied Arts and Technology of Ontario has produced the Handbook for Success: Special Needs (1988), a resource which may be used by college personnel involved with special needs students; and the Ministry of Colleges and Universities has targeted funds ($3.5M annually at present) to support the provision of special needs services at all colleges; with these funds colleges are establishing a Special Needs Offices to coordinate services and accommodations for special needs students — such services will include pre-admisssion counselling and job placement assistance. In addition, colleges are involved in the Special Education Pilot Project with Brock University; this project is aimed specifically at training special needs counsellors and faculty at the post-secondary level.

Issues/Implications

- Given Bill 82, exceptional secondary school students will increasingly have higher and higher expectations of the college system.

- Given that the colleges, community groups, private trainers, and industry all provide post high school vocational training to special needs students, what should be the colleges' role? What partnerships should be developed between colleges and industry to benefit special needs students? Given the many Ministries involved in providing services to those with special needs, how can their efforts be better coordinated?

- For which programs and services for special needs students would institutional specialization within the college system be the most effective means for meeting their needs? Responses to both the 1986 College President's Task Force Report of College Services to Special Needs Students and a 1988 OCUA survey indicated that institutional specialization according to disability should *not* be encouraged; it would limit student choice and accessibility. Nevertheless, there may be cases in which specialization represented a more effective and/or efficient route to follow. An examination of institutions such as Gallaudet University, a university for the deaf in the United States, might assist in clarifying the specialization issue.

- The Atlantic Centre of Support for Disabled Students, located at Saint Mary's University, has initiated work, in cooperation with all education institutions in the region, to assess the needs of students with particular disabilities and to determine the size of the population requiring special attention. Would such a centre in Ontario assist with policy and program development?

Related Background Documents Available at Council of Regents

Elizabeth Thorsen, Vision 2000 Miniproject #11 - <u>The College Communities: Special Needs</u>, 1989.

Student Services: Meeting Students' Needs For Access and Success (Project #13)

- The College Committee on Student Affairs (CCSA) submitted to Vision 2000 a paper which describes, from its perspective, some of the most important barriers limiting *access* to and *success* in college programs; the paper also suggests ways in which these barriers may be reduced. This 'Highlights' report is a brief summary of the CCSA paper.

- Adult illiteracy is raised as a major concern and barrier to training. The CCSA urges "the government to give the mandate for redressing the problems of illiteracy to one of the educational 'systems.'"

- In addition to the 'illiterate population,' specific groups are felt not to be accessing the colleges to the extent that one would expect or hope; these include: basic and general level graduates; the learning disabled and other students with special needs; and native students.

- Barriers to access cited by CCSA include: the level of student financial assistance; a lack of flexibility in part-time programming; a lack of affordable child care; confusion about what programs are available and what they are about; a lack of formal recognition of 'life experience' for the mature student; the restricted ability to provide student services during evenings and weekends due to funding constraints; and a lack of sensitivity on the part of college staff to the needs of specific populations.

- In terms of "facilitating and maximizing student development and success" the CCSA stresses the need for "a holistic view of student growth (which) recognizes the essential value and importance of the learning that the student is afforded outside of the classroom walls." "An end must be put to the narrow attitude that service agents are less than necessary as opposed to integral to the student experience and academic support."

- To promote appropriate program selection by students the CCSA recommends that the college system research and develop 'diagnostic' tests; the progress of 'high risk' students should be carefully followed so that remedial action may be undertaken as soon as required — tracking systems need to be developed and implemented.

Related Background Documents Available at Council of Regents

College Committee on Student Affairs, <u>Access and Success</u> (A Submission to Vision 2000), 1989.

2. Educational Programming

Distribution of College Students by Discipline Area and Labour Market Needs
(Project #7)

Findings

- The major objective of this project was to shed some light on the question: Do college students' enrolment decisions with respect to field of study match up well with labour market needs? Of particular interest was the relationship between enrolment in technology programs and labour market conditions.

- Between 1983 and 1987, enrolment in technology programs decreased 19.5 per cent; enrolment in other full-time post-secondary programs increased 8.6 per cent.

- Over the same period, the percentage of technology graduates available for work obtaining employment related to their field of study increased from 56.0 per cent to 82.9 per cent, a 48 per cent increase.

- At first glance one might conclude that statistics such as these suggest that technology enrolment is not very responsive to labour market conditions: enrolment in both absolute and relative terms fell during a period in which the probability of obtaining related employment increased.

- But, two factors should be noted, namely: (i) **throughout the period 1983-86 the probability of technology graduates obtaining related employment was below that of graduates of other fields**, and by as much as 10-15 percentage points in 1983 and 1984. Only in 1987 did the probability of technology graduates obtaining related employment match that of graduates of other fields; thus, even if instantaneous response to labour market conditions were possible on the part of students, one would have expected that technology enrolment would have suffered relative to enrolment in other programs at least through 1986; and (ii) **the time which elapses between the decision to enter a particular college program and entry into the labour market**. The decision to position oneself for admittance to a technology program is often made early in high school through selection of high school courses. Thus, given the recession of 1982 and its very adverse and fairly prolonged impact on employment prospects for technology graduates, it is not surprising that technology enrolment fell again in 1987; this is consistent with students' college-related educational decisions being affected by the state of the labour market a few years prior to actual entry into a college program. (Enrolment in technological studies in the secondary schools as a percentage of total enrolment declined considerably between 1983 and 1986.)

- If the likelihood of a technology graduate obtaining related employment continues, beyond 1987, to match that in other fields, then one would expect to observe technology enrolment to soon begin to grow at about the same rate as enrolment in other fields. Preliminary enrolment figures for 1989 suggest this is occurring; in 1989 technology enrolment has increased 3.9 per cent, while total system enrolment has increased 3.3 per cent over the previous year's level.

- While our analysis of the sensitivity of students to labour market conditions is impressionistic at best, American studies of a much more 'scientific' and detailed nature, support the conclusion that college students are fairly responsive to labour market conditions when selecting a field of study. See, for example, Richard B. Freeman: (i) The Market for College-Trained Manpower, Harvard University Press, 1971; and (ii) The Over-Educated American, Academic Press, 1976.

- Other factors — non-economic factors — have been brought forward to explain the decline in technology enrolment during the 1980s. These relate to concerns about: (i) the level of knowledge of technical occupations of many high school teachers and guidance counsellors; (ii) the adequacy of math and science programs in our elementary and secondary schools; (iii) parental and societal attitudes towards

technical occupations; and (iv) the marketing of technology programs to high school students by the colleges themselves.

- Undoubtedly each of these factors and others affect the decision to enrol in technology programs and efforts need to be made to overcome the concerns noted above. But even if improvements were made in these areas, one would likely still observe recurring shortages and surpluses of college graduates in technology and other fields. As long as (i) college students are fairly responsive to labour market conditions and (ii) the time which elapses between the decision to enter a program and graduation from a program is several years, one can expect labour shortages followed by labour surpluses on a fairly regular basis.

- Another concern related to declining technology enrolment is that there is the impression that colleges have lowered their admission standards and/or program standards in an effort to maintain enrolment and avoid cancellation of technology programs.

Issues/Implications

- If one accepts the notion that college students in selecting a field of study are fairly responsive to labour market conditions, then there are actions which might be undertaken to reduce the magnitude of shortages and surpluses in particular occupational fields. For example: scholarships might be used to attract students into fields in which shortages are anticipated; if college training became more general in nature (i.e., if students acquired skills which were more transferable from one occupation to another), then the adaptability of college graduates to changing labour market conditions should improve, provided that employers were able and willing to increase their specific skills training; and the chronological time it takes to train an individual in a particular field could be shortened if the school year were lengthened.

- In what discipline areas, if any, these actions should be undertaken depends on the impact of labour market imbalances. For example, in some technology-related occupations a small shortage of skilled technologists may represent a major 'bottle-neck' to production, while a small shortage in other occupations may have little impact on production.

- The government may wish to designate certain programs as priority programs and provide these programs sufficient funding to allow them to operate effectively in times of declining enrolment. If this were done, the pressure to lower admission and program standards would lessen during such periods.

Related Background Documents Available at Council of Regents

Robert Bernhardt, <u>Distribution of College Students by Discipline Area and Current Labour Market Needs</u>, 1989.

Future Educational/Training Requirements of Ontario's Population (Project #8)

Findings

- The future educational/training needs of Ontario's population will be influenced by significant demographic changes <u>and</u> significant changes in the skills requirements of Ontario's economy.

- The key demographic changes over the next ten years will be: (i) a decrease in the number of young people entering the labour force, at least through to the year 2000; the population aged 17 to 24 is projected to decrease by almost 120,000 or 10 per cent between 1987 and 2000; (ii) a large increase in the number of middle-aged workers; between 1987 and 2000, the population aged 25-54 is projected to increase by almost 1,000,000 or 25 per cent; (iii) a less rapid increase in the growth of female labour force participation rates; (iv) a substantial increase in the seniors' population; those aged 65 and over

will increase by 42 per cent between 1987 and 2000, and by a further 26 per cent between 2000 and 2011; and (v) changing immigration patterns, with net migration to Ontario projected to decline and new immigrants to Ontario increasingly coming from 'non-traditional' sources (e.g., Asia, Africa, Central and South America).

- As a result of these demographic changes, Ontario's economy should shift from a situation of labour surpluses and a relatively young labour force, which characterized most of the past two decades, to labour shortages and a noticeably aging labour force.

- Key factors likely to alter the nature of skills required in our economy include: (i) the pressures of international competition; (ii) technological change; and (iii) the introduction of new organizational structures within the workplace.

- Calls for a restructuring of the Ontario economy are increasingly being heard. There is concern that unless Ontario intensifies its efforts to generate income through trade of manufactured goods, the growth of the service sector, including both commercial services (e.g., finance, communications...) and social/consumption services (e.g., health, education, and leisure services), will be severely constrained. And growth in income through trade is felt to be highly dependent on research and development, activities in which Canada lags behind other industrialized countries; in 1987, Canada spent 1.3 per cent of its GDP on R&D, while countries such as Japan and Sweden were spending more than twice this percentage.

- International competition and technological change will, for many, mean several significant job changes within the course of their working lives.

- Critical labour supply shortages in some industrial trades already exist and concerns are being raised about potential shortages of highly-qualified employees in technology-oriented occupations.

- The desired entry-level skills for the semi-skilled and unskilled worker, currently at the Grade 12 level, are expected to continue to rise. Numeracy, literacy and communication skills are increasingly becoming essential prerequisites for entry to the labour force.

- And as stressed by the MIT Commission on Industrial Productivity, there will be a need to: cultivate a more involved, less specialized, continuously learning work force; form product teams within firms to integrate and (where feasible) perform concurrently the functions of research and development, product design, and process design to achieve greater efficiency and a shorter time to market; flatten organizational hierarchies to give employees greater responsibility and broader experience; to have key employees develop an adequate understanding of foreign cultures. (See pp. 147-155, MIT Commission on Industrial Productivity, Made in America - Regaining the Productive Edge, The MIT Press, 1989.)

Issues/Implications

- The changing demographics and skills requirements of the economy raise several questions related to future educational and training strategies within Ontario.

  What role should Ontario's colleges play in the training of the **older worker**? What changes in teaching methodologies, program content and duration, and scheduling may be required? What role should industry play in the training of the older worker?

  What role should the colleges play with respect to the **high school dropout**? With respect to the **Grade 12 general graduate** who has entered a college post-secondary program but is lacking the literacy and numeracy skills one would expect of a Grade 12 graduate?

What curriculum changes may be required in college post-secondary programs? Should, for example, **team projects** and courses on **other cultures/languages** become a component of most programs? Should the number of **co-op programs** be expanded as a means to instil more positive attitudes about life-long learning ?

Should colleges focus on the provision of **portable skills** (i.e., skills which are applicable in several occupations and which provide a foundation for further acquisition of skills) and leave the more specific job-skills training to industry? If colleges moved in this direction, would students show the same willingness to attend college or is it the very job specific skills which they are seeking?

Should colleges become more involved in **applied research** in, for example, the engineering technology field? Is there a danger that the critical mass of resources necessary for successful research activities would be less likely to materialize if limited research resources were spread across not only business, industry, universities, and government, but, also, the colleges?

Will traditional **market forces** be sufficient to attract enough competent individuals into trades and technology training? Or are social biases against trades and technology occupations such that market forces will not be sufficient? Do our **apprenticeship programs** and trades regulations require a major revamping? Do high school and college **technology programs** require a major revamping?

Should colleges attempt to simultaneously perform **functions ranging from** providing basic job readiness training, **to** advanced training and applied research in technical fields?

Related Background Documents Available at Council of Regents

This highlight document was prepared in part on the basis of unpublished notes provided to Study Team 1 by officials from the Premier's Council. The interested reader is referred to current and future publications of the Premier's Council and to The MIT Commission on Industrial Productivity, <u>Made in America - Regaining the Productive Edge</u>, The MIT Press, 1989.

Regional Distribution of Enrolment by Program and Breadth of Programming by Region (Project #9)

Findings

* This project assesses the extent to which enrolment is concentrated in various regions of the province in any of the occupational groups for which colleges provide programs. It also examines the breadth of programming offered in each region.

* To determine whether enrolment in an occupational field was concentrated in particular regions, it was arbitrarily defined that enrolment concentration was considered 'high' if a region's share of system enrolment in a particular occupational/program field was more than **twice** the region's share of total system enrolment. College programs were grouped into 51 fields, of which 14 were technology-related, 16 business-related, 17 were in the applied arts field, and 4 were in health.

* The analysis was conducted in terms of the six 'economic' regions of Ontario, namely: Northwest (Confederation); Northeast (Cambrian, Canadore, Northern, Sault); Eastern (Algonquin, Loyalist, St. Lawrence); Central (Conestoga, Georgian, Mohawk, Niagara, S. S. Fleming); and Metro Toronto (Centennial, Durham, George Brown, Humber, Seneca, Sheridan). Table 1 shows the results.

* The results indicate that the selection of programs by students is positively related to their region's industrial/occupational structure. For example: enrolment in the two northern regions is '*concentrated*' in technology programs related to the resource-based industries in the regions; enrolment in the Eastern

region, where the proportion of the labour force employed in the government sector is about twice that for the province as a whole, is 'concentrated' in government-related programs; and enrolment in the Southwest region, relative to the province as a whole, is disproportionately weighted towards automotive technology, reflecting that region's involvement in the auto industry.

• The Central and Metro regions are the most comprehensive in their program offerings, offering programs in more than 90 per cent of the occupational groupings used in the analysis. The northern regions are the least comprehensive, offering programs in about two-thirds of the occupational groupings. Given that northern colleges serve a much smaller population than Metro colleges and that the northern industrial base is not as diversified, the narrower range of programs offered in the northern regions does reflect a certain sensitivity to market conditions. It should also be pointed out that the range of programs in the northern colleges would be still narrower if it were not for the special funding provided to these colleges to allow them to offer programs with smaller section sizes than at other colleges in the system.

Table 1
Program Enrolment Concentration by Economic Region, Fall 1988

'High' Concentration Program Fields	Regional Enrolment in Program Field as a % System Enrolment in Program Field	# of Students in Program Field in Region
Northwest Region (2.7% of Total System Enrolment, 2,550 Students)		
Automotive -Technology	6.3%	26
Power -Technology	17.9%	21
Welding - Technology	15.6%	14
Aviation - Technology	31.4%	241
Child/Youth Worker - Applied Arts	5.7%	72
Health - Miscellaneous	8.5%	42
Northeast Region (8.6% of Total System Enrolment, 8,095 Students)		
Drafting - Technology	24.6%	46
Instrumentation - Technology	24.8%	70
Resources - Technology	22.7%	365
Welding - Technology	36.1%	44
Aviation - Technology	25.3%	194
Preparatory/Upgrading - Applied Arts	21.5%	882
Eastern Region (15.2% of Total System Enrolment, 14,244 Students)		
Government/Real Estate - Business	35.3%	88
Southwest Region (11.8% of Total System Enrolment, 11,117 Students)		
Automotive - Technology	40.7%	167
Government/Real Estate - Business	26.5%	66
Art - Applied Arts	25.8%	125
Horticulture - Applied Arts	28.2%	86
Develop./Mental Ret. Wkr. - Applied Arts	30.1%	346

'High' Concentration Program Fields	Regional Enrolment in Program Field as a % System Enrolment in Program Field	# of Students in Program Field in Region
Central Region (21.1% of Total System Enrolment, 19,804 Students)		
Resources - Technology	65.8%	1,060
Materials Management - Business	88.6%	140
Metro Region (40.5% of Total System Enrolment, 38,030 Students)		
Recreation Facilities - Business	100.0%	147
Small Business - Business	85.0%	238
Fashion - Applied Arts	88.4%	953
Crafts - Applied Arts	83.8%	218
Public Relations - Applied Arts	81.8%	257

Comprehensiveness of College Programming

Division	Economic Region						
	NW	NE	East	SW	Central	Metro	System
	# of programs/Occupational groups						
Technology	9	12	10	11	14	14	14
Business	10	10	13	11	13	15	16
Applied Arts	9	11	15	14	14	17	17
Health	3	3	4	4	4	4	4
Total	**31**	**36**	**42**	**40**	**45**	**50**	**51**

Issues/Implications

- The variations among the regions in terms of both enrolment distribution by program area and in terms of the comprehensiveness of programming provide impressionistic evidence that students and colleges are fairly sensitive to the labour market conditions in their region.

- Although the analysis cannot make the case in and of itself for or against program rationalization, it indicates that one should not 'leap' to the decision that more formal program rationalization is required in the college system. Much more in-depth analysis should be undertaken before reaching any firm conclusions in favour of program rationalization.

Related Background Documents Available at Council of Regents

Howard Rundle, Enrolment Concentration in College Programs, 1989.

International Education and Ontario's Colleges (Project #30)

Findings

- Between 1976 and 1987 the number of international students enroled in full-time, college post-secondary programs in Ontario decreased by about 50 per cent, falling from about 1,800 in 1976 to 900 in 1987.

- Beyond the collection of numbers of international students attending college, little information is systematically collected on the international activities of Ontario's colleges. In its brief to Vision 2000, the College Committee on International Education (CCIE) notes several types of international education activities in which the colleges, to a greater or lesser extent, are involved, including:

    - international students studying at Ontario colleges;

    - study-abroad programs for Ontario students;

    - work-abroad programs (i.e., co-op programs) for Ontario students;

    - student exchange programs;

    - staff exchanges;

    - consulting services provided by college staff to international clients; and

    - institutional twinning.

- The CCIE believes that the CAATs "are at an important crossroads: to carry on business as in the past or to adapt to the new realities"; that is adapt to "a change-prone, technology-driven, knowledge-based, globally-interdependent society." (pp. 1-2)

- As part of the process of adapting to the 'new realities,' the CCIE recommends that:

    - international education be recognized as an integral part of the college mandate;

    - each college have an active International Education Department;

    - the colleges develop an effective marketing strategy with respect to their international education initiatives and services;

    - a system-wide international marketing secretariat be established to coordinate and support international activities of the colleges; and

    - each college 'internationalize' its curriculum.

- In addition, to the 'economic' arguments for expanding the international education activities of the colleges (that is, the need to provide Ontario residents with the skills and education necessary for adapting to and competing in the increasingly interdependent international economy), other potential benefits include:

    - a strengthening of Canada's contribution to developing countries;

    - the development of a better understanding of different cultures and global issues, among both Ontario and non-Ontario residents, which, given the expected increase in the international mobility of labour, will be ever more necessary if the full benefits of labour mobility are to be realized; and

    - a means for enriching the working lives of college teachers.

Issues/Implications

- The qualitative arguments for expanding the international education activities of the colleges would appear to be quite strong. In undertaking such an expansion, however, there will be a need to:

    - ensure that international students studying here and Ontario students studying or working abroad receive quality instruction and work placements. Within Ontario, this may mean that each college or groups of colleges should become specialists in particular fields of international education. For example, selected colleges might provide nursing education to international students; others might focus on business or technology training, and so on. If quality is not assured, there is the real danger that the flow of students to and from Ontario will not reach desirable levels.

- coordinate and share curriculum development resources within the college system so that an international curriculum may be effectively integrated into existing college programs for the benefit of Ontario residents who do not study abroad;

- achieve a reasonable balance between the flow of students into and from Ontario, particularly with respect to formal exchange programs; otherwise, if, for example, the inflow exceeded the outflow, the Ontario public may feel that resources are being directed at foreign students at the expense of Ontario's students and, as a result, may discourage further forays into international education;

- develop systematic data and information systems on the international education activities of colleges; and

- in general, plan and coordinate the international activities of the colleges. The college system in *conjunction with* representatives of the provincial and federal governments might undertake to develop a strategic plan, and selected policies and procedures related to international education. (Both the federal and provincial governments are involved in sponsoring roles and, as well, represent valuable resources in terms of initiating and developing contacts abroad.)

Related Background Documents Available at Council of Regents

College Committee on International Education, International Education and the Ontario Colleges of Applied Arts & Technology, 1989.

International Activities Unit, Ministry of Colleges and Universities, Submission to Vision 2000, (Submission requested by Vision 2000; it represents the personal views of staff and is not meant to represent a ministry position or policy), 1989.
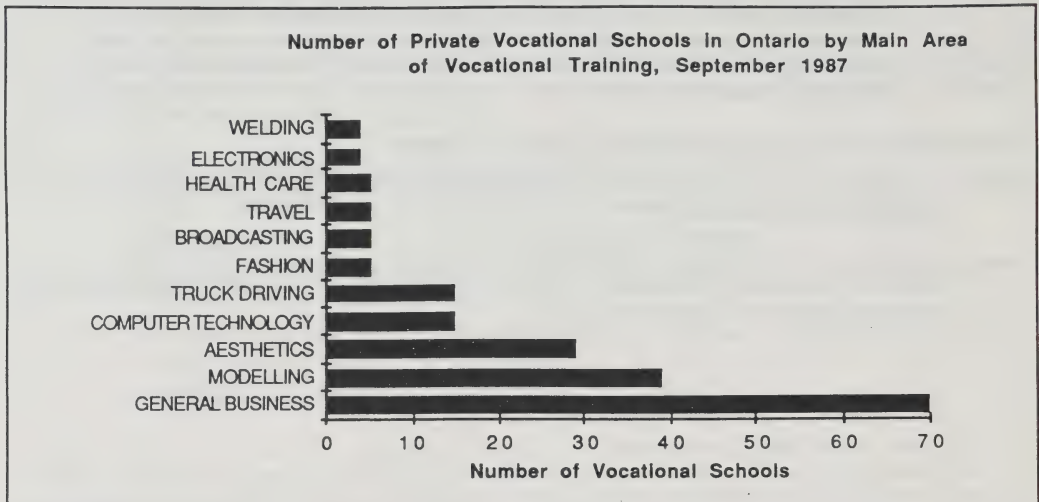
3. Colleges and Alternative Educational Systems

Private Vocational Schools (Project #21)

Findings

- Private vocational schools have a long history of operation in Ontario, dating back to the 1860s. Today there are more than 200 registered schools and it is a $75 million a year industry, training on average 30,000 students a year. Enrolment has been declining since the early 1980s. Historically, private vocational schools' enrolment trends have been counter-cyclical: when the economy shrinks, causing higher unemployment, enrolment swells; conversely, enrolments taper as economic expansion occurs.

Number of Private Vocational Schools in Ontario by Main Area of Vocational Training, September 1987

Area	Number of Vocational Schools
WELDING	~3
ELECTRONICS	~3
HEALTH CARE	~4
TRAVEL	~4
BROADCASTING	~4
FASHION	~4
TRUCK DRIVING	~14
COMPUTER TECHNOLOGY	~14
AESTHETICS	~29
MODELLING	~39
GENERAL BUSINESS	~70

Source: Ministry of Colleges and Universities, Private Vocational Schools Unit

- The schools attract a wide spectrum of students (from those right out of high school to university graduates who want more specific training), but have been most successful in attracting 'mature students' who have labour force experience and may be attempting a career change or who require short-term, skill-specific training.

- Programs average 6 months to 1 year in duration, but may last as long as 2 years. The average tuition fee is $3080.19, but can be as high as $5000-$10,000. In 1987/88, tuition fees at the CAATs for a full-time student were $620.00 per year. The college student's tuition fees represent slightly less than 11% of the annual operating costs of training a post-secondary student; while tuition fees at private vocational schools represent 100% of annual operating costs, as the schools receive no outside funding.

- It is estimated that a day of training at a private vocational school is 40-50% cheaper than an equivalent day of training at a CAAT.

- The schools are subject to the Private Vocational Schools Act (1974) and programs are accredited or regulated by a number of institutions including: the National Accreditation Commission (NAC); the Association of Canadian Career Colleges (ACCC); the Private Career Education Council (PCEC).

- The private vocational schools have a distinct advantage over their CAAT counterparts in terms of lower student/teacher ratios; frequent start-up-dates, and when providing training in 'comparable' programs tend to do so in a shorter period of time. On the other hand, they are very risk adverse and cannot offer programs that involve high capital costs or of longer duration.

Issues/Implications

- Changing population demographics may be advantageous to the private vocational schools, as the population aged 25-54 is projected to increase by almost 25%, and this age group makes up their natural market. On the other hand the population aged 17 to 24 is expected to decline by almost 10% between 1987 and 2000, and almost 85% of post-secondary enrolment falls within this age range.

- The redirection of federal training expenditures, through the Canadian Jobs Strategy (CJS), means that the CAATs will have to actively compete with other suppliers (including private vocational schools) of training

- There exists a concern that private vocational schools' training is too skill- and job-specific, especially in light of evidence that employers' needs may be shifting towards requiring a multiskilled labour force. As well, new production techniques may result in training programs with higher capital costs and of considerably longer duration. It is unlikely that the private vocational schools will become involved in training programs that require large capital expenditures or that are of a longer nature.

- The CAATs may need to examine whether they should operate as if they are in a 'segmented' market and relinquish selected programs to the private vocational schools.

Related Background Documents Available at Council of Regents

Robert Alexander Marshall, Vision 2000 Miniproject #21 - <u>Private Vocational Schools - The Fourth Option?</u>, 1989.

Trends in Federal Training Policy (Project #5A)

Findings

- Federal expenditures on *active* labour market programs (e.g., mobility assistance, training and retraining, placement services, and job creation) have fallen *relative* to expenditures on *passive* programs (e.g., income maintenance programs). For example, from the mid-sixties to the end of that decade, the ratio of federal unemployment insurance expenditures to federal training expenditures was about 1.37 : 1; by 1987 this ratio was almost 7:1. In 1987 Canada ranked sixth among the 22 OECD countries in expenditures on unemployment compensation; Canada spent 1.68% of its GDP on unemployment compensation, while, for example, Germany spent 1.33%, Japan 0.42%, and the United States 0.59%.

- The introduction of the **Canadian Jobs Strategy (CJS)** in 1985 represented a fundamental change in federal government policy. CJS places much greater emphasis on the involvement of the private sector in the development and delivery of training programs than previous federal initiatives.

**Percentage of Federal Training Dollars
to Colleges and Other Suppliers of Training**

		Estimates		
	85/86	86/87	87/88	88/89
CAATs	98.4	95.9	94.3	91.9
Other Suppliers	1.6	4.1	5.7	8.1

Source: Ontario Ministry of Skills Development

**Percentage of Colleges' Federal Training Dollars
Via 'Indirect' and 'Direct' Purchase Routes**

		Estimates		
	85/86	86/87	87/88	88/89
Indirect	0	8.3	19.3	27.4
Direct	100	91.7	80.7	72.6

Source: Ontario Ministry of Skills Development

- Total federal training expenditures in Ontario fell 13.5% (in real terms) between the introduction of CJS in 1985-86 and the 1988-89 fiscal year.

- Under the CJS, federal training dollars may find their way to the colleges by two routes, namely: (i) through 'direct' purchases by the federal government; and (ii) through 'indirect' training purchases by Community Industrial Training Committees and other community agencies.

- Federal training expenditures (direct and indirect) *flowing to Ontario's colleges* have been falling at an even greater rate than total federal training expenditures since the introduction of CJS. Between 1985-86 and 1988-89, federal expenditures flowing to the colleges are estimated to have fallen 19.1% in real terms.

- Increasingly the federal dollars finding their way to the colleges are arriving by the indirect route. In 1985-86 essentially none of the federal dollars flowing to the colleges came via the indirect route; by 1988-89 more than 25% of federal funds were arriving by this route. Thus, the colleges are becoming increasingly dependent upon the *competitive* (indirect) route as a source of federal training dollars.

- In the recently published de Grandpre Report (1989), **Adjusting to Win**, it is argued that it is not possible to distinguish between unemployment that is a result of the Canada-U.S. free trade and unemployment caused by other factors. The report goes on to suggest that on 'equity' grounds all persons who find themselves unemployed should have access to training and retraining. To finance this rather 'comprehensive' policy, the introduction of a levy-grant scheme is advocated " as an incentive to stimulate private sector training." Under such a scheme a tax liability would be established which employers would be able to offset by making expenditures on training.

- The recent pronouncements in the Speech from the Throne (XXX Parliament) suggest, however, that, at least in the short run, a levy-grant system will not be part of the federal government's program. The government has indicated that it intends to shift expenditures from passive labour market measures

(UI) to more active measures. In 1990 $800 million of UI expenditures will be reallocated to training and skills upgrading programs. The government, in keeping with the policy direction initiated by CJS, continues to stress the need for a 'substantial' increase in the private sector's involvement in training.

Issues/Implications

- For the immediate future at least, the college system will find itself competing with private suppliers of training for federal funding. To flourish in this more competitive environment the college system must determine the program and geographical areas in which it is likely to have a comparative advantage. Colleges are likely to have an advantage in program areas which by necessity are longer in duration or more capital intensive in terms of inputs.

- The 'jury' is still out on what areas of training the private sector can be more *cost-effective* than public institutions. As experience increases, we will likely witness shifts in the allocation of federal funding — training which was initially thought to be better suited for the private sector will move to the colleges and vice versa. Thus the colleges will need to be not only competitive but also able to withstand and respond to changing federal views on where different types of training should take place. Increasingly training 'partnerships' between the private sector and public institutions may develop, with each sector contributing to a particular training program what it can do best.

- The federal government's reallocation of UI funds does signal a movement towards a more active labour market policy. The colleges, even given stiff competition from the private sector, may be able to increase their revenues and training activity somewhat if this change in government direction persists.

Related Background Documents Available at Council of Regents

Craig McFadyen, Vision 2000 Miniproject #5,- Trends in Federal Training Policy, 1989.

Employer Sponsored Training (Project #22)

Findings

- The incidence of employer sponsored training (EST) appears to be positively correlated to firm size. A survey conducted in 1984 by the Ontario Manpower Commission found that approximately 27% of all Ontario employers sponsored formal training programs and that "the incidence increases with the size of the establishment, from a low of 24% for the smallest establishments (those with fewer than 20 employees) to a high of 88% for the largest (those with 200 or more employees)."

- There are indications that EST has been on the increase in recent years. The OMC, for example, reported that the percentage of medium-sized firms engaged in formal training increased from 52% in 1984 to 61% in 1987. This growth in EST, however, has been attributed to increases in economic growth during this period and not to increased development of a 'training culture' within firms.

- EST tends to focus on certain occupations within firms (management followed by sales staff, production workers, skilled labour, and clerical staff); it usually is of short duration (65% of employer sponsored training is of 2 weeks duration or less); and it tends to be geared to the workplace orientation needs of new hires.

- In comparison with other advanced industrialized countries, expenditures by Canadian employers on training is well below the average; Canada relies on publicly funded institutional training to a much greater extent than other countries.

- Two factors commonly cited as inhibitors to EST are: (i) fear of 'poaching' by competitors — it may be less expensive to hire individuals trained by another firm than to provide training; and (ii) insufficient size of a firm — for smaller firms the per unit costs of providing training may exceed the benefits.

- While a significant proportion of EST is done 'in-house,' approximately 30% is contracted out to public or private sector trainers. EST is accounting for a growing share of college revenues and, although this share remains low system-wide (less than 3% of total revenue), some colleges have experienced considerable success in attracting revenues (up to 9% of total revenue) from this source.

- Employers indicate that there is much room for increased college participation in the delivery of employer sponsored training; however, they also stress that if this is to occur, colleges will need to: (i) become more knowledgeable about the needs of employers; (ii) place more emphasis on standards; (iii) be more flexible in terms of curriculum design and location of training; and (iv) better inform firms, particularly small and medium sized firms, of their training capabilities.

Issues/Implications

- The changing demographics and increasing difficulties in attracting skilled immigrant labour will place greater pressures on employers to find ways for upgrading and updating employees. The colleges can play an important role in this area. However, to the extent that pubic funds are (might be) used to assist employers in their training efforts, care must be taken to ensure not only that the specific interests of employers are being addressed but, also, that societal needs are being met.

- From the public perspective, one factor which needs to be taken into account is the portability of skills acquired through training, in terms of both transferability from one industry/occupation to another and transferability over time (that is, are the skills ones which will serve workers well over an extended period of time or are they likely to be of value for a relatively short period of time). Another factor which may be important from the public's perspective is the fact that smaller firms tend to be less inclined or able to engage in training than larger firms. To serve the public interest colleges may need to resist focussing too much of their attention on obtaining contracts with larger firms; while providing training services to larger firms may be the easier and more prestigious route for colleges to follow, it should not be followed at the neglect of the needs of smaller firms.

- It may be worthwhile to assess the feasibility of having colleges offer their training services to employers at a variety of prices, ranging from 'full cost' prices to 'subsidized' prices. The price quoted to a particular employer could depend, in part, on the nature of the skills training (general and portable versus specific and limited portability) desired by the employer and the ability of the employer to pay (as determined somewhat arbitrarily by factors such as the size of a firm).

- Employers increasingly seem to desire training which enhances their employees' basic analytic and communication skills and which also provides employees with quite firm specific job skills. Colleges will need to develop curriculum which "strike(s) a balance between the specific and the general" if they are to increase their participation in EST.

- College faculty who have been mainly involved in teaching 'young' high school graduates may need to adjust their teaching styles to reflect the different needs and backgrounds of the 'older' employer-sponsored students. College faculty, to an even greater extent than before, will need to keep abreast of technological and organizational changes in the workplace if the training is to be considered relevant by employer-sponsored students. Colleges will need to find ways of increasing their flexibility in terms of when and where EST can be offered.

- By improving the development and marketing of programs to industry for the purposes of attracting greater EST revenues, the colleges may also improve their competitive position vis à vis the growing pool of 'indirect' (i.e., CITC administered) federal training purchases.

Related Background Documents Available at Council of Regents

Craig McFadyen, Jim Hsu and Herb Young, Employer Sponsored Training, 1989.

Determinants of Post-Secondary Education Choice: The Choice Between Community Colleges and Universities (Project #3)

Findings

- What determines the type of post-secondary institution (college versus university) a student selects? This is essentially the question posed by Noemi Stokes and David Foot in work undertaken by them for Vision 2000.

- Answering this question is important not only from the perspective of accessibility (the socioeconomic distinctions between college and university students may be as significant as the distinctions between those who attend post-secondary institutions and those who do not) but, also, from the perspective of an 'efficient' distribution of students between colleges and universities (students' decisions regarding the type of post-secondary institution to attend may not conform to societal needs).

- Stokes and Foot include in their analysis of educational choice variables relating to:

  - *Family Background* (e.g., parental education, ethnicity, and parental income);

  - *Student Characteristics* (e.g., gender, age, and marital status);

  - *Institutional Characteristics* (e.g., reputation, location, and programs of institutions); and

  - *Financial Factors* (e.g., tuition fees and other costs of attendance, and student loans).

- If the government wanted to influence student choice, the financial variables represent one set of policy instruments which it might utilize. Thus, understanding how students respond to these instruments is important and the work of Stokes and Foot sheds some light on this.

- Their findings are based on an analysis of data from a nation-wide survey of post-secondary students undertaken by Statistics Canada in spring 1984; from this sample they analyzed data relating to first year, full-time students. The results reported here are for Ontario (n=857) only; national (n=5775) and other regional results may be found in their papers.

Impact of Family Background and Student Characteristics on Student Choice

	Probability of Attending College	Probability of Attending University[1]	Ratio of Probabilities
Family Background			
Mother's Education:			
Elementary	.379	.621	0.61
Secondary	.401	.599	0.67
Some Post-Sec.	.389	.611	0.64

---

1. These probabilities were derived from an analysis which simultaneously takes into consideration all factors determining student choice. These probabilities are not the simple averages derived from the sample.

	Probability of Attending College	Probability of Attending University	Ratio of Probabilities
University[2]	.275	.725	0.38
Father's Education:			
Elementary	.492	.508	0.97
Secondary	.443	.557	0.80
Some Post-Sec.	.401	.599	0.67
University	.196	.804	0.24
Ethnicity[3] :			
English	.409	.591	0.69
French	.399	.601	0.66
Irish	.344	.656	0.52
Scottish	.356	.644	0.55
German	.342	.658	0.52
Italian	.408	.592	0.69
Ukrainian[4]	.133	.867	0.15
Other Minority	.367	.633	0.58
Student Characteristics			
Family Status:			
Single	.334	.666	0.50
Sep./Div./Wid.[4]	.725	.275	2.64
Married	.369	.631	0.58
Gender:			
Male	.384	.616	0.62
Female	.366	.634	0.58
Age:			
Age=20	.422	.578	0.73
Age=30	.168	.832	0.20
Last Previous Activity			
Student Last Yr.	.322	.678	0.47
Actual	.375	.625	0.60

• Parents' education was found to be a very important determinant of institutional choice. Controlling for all other factors, post-secondary students with fathers with an elementary school education are 2.5 (.492/.196) times more likely to choose college over university than students with fathers who have graduated from university. Similarly, post-secondary students with mothers with an elementary education are 1.4 (.379/.275) times more likely to choose college over university than students with

---

[2]. One way to interpret these probabilities is as follows. If, for example, one selected 1,000 first year post-secondary students who had mothers with a university degree <u>and</u> these students were distributed in the same manner as the post-secondary population as a whole with respect to other variables (e.g., ethnicity, age, family income, father's education, sex...), then about 275 would be enroled in college and 725 in university, while in the post-secondary population as a whole 375 of every 1,000 students select college and 625 select university.

[3]. Students may report more than one ethnicity, so these probabilities should be treated with some care.

[4]. Based on very small sample size.

university-educated mothers. These results are consistent with the hypothesis that children become better acquainted with the benefits of an institution attended by their parents and are positively influenced by this knowledge.

- Ontario post-secondary students from English, French, and Italian backgrounds are more likely to select college over university than students from other ethnic backgrounds. For example, controlling for all other factors, students from English backgrounds are 1.2 (.409/.344) times more likely to choose college over university than students with Irish backgrounds. Differences among ethnic groups in terms of the degree of need for achievement and in terms of what satisfies the need for achievement may affect the choice between college and university.

- The likelihood of selecting college over university decreases as parental income increases. Between the 25th percentile and 75th percentile of parental income the probability of selecting college over university decreases by about 15 percent, from 0.42 to 0.36.

- Younger students are more likely to choose college over university than older students. All other things being equal, students aged 20 are 2.5 (.422/.168) times more likely to choose college over university than students aged 30. This result may reflect not only the fact that college entrants have generally had one year less of high school than university entrants but, also, that "older, more mature students find their inner needs better satisfied by a somewhat more sophisticated university education." (p. 17 Regional Paper)

- In addition, all other things being equal: (i) individuals who were working or had family responsibilities are more likely to choose college over university than individuals who were in school in the previous year; (ii) first year post-secondary students who are married are 1.1 (.369/.334) times more likely to choose college over university than single students, with married females being more than 1.5 times as likely as single females; and (iii) first year post-secondary males are about 1.05 (.384/.366) times more likely to choose college over university than their female counterparts.

- Students who indicated that the type of program offered by an institution was important were about 15 percent more likely to choose college over university than students who did not indicate that the type of program was important.

- Students who indicated that the reputation of the institution was important were about 30 percent less likely to choose college over university than students who did not indicate that reputation was important.

Issues/Implications

- Government has little if any influence over many of the variables affecting student choice. For example, ethnicity and parental education cannot be significantly affected by government policy, particularly in the short run.

- Tuition, however, is a variable over which government has some control. But the results of the Foot/Stokes analysis of student choice suggest that while tuition in a statistical sense is a significant variable, it does not appear to be a lever which could be used to bring about major changes to the distribution of students between college and university. Their results indicate that a 7% increase in university fees, holding college fees constant, would lower the percentage of students selecting university over college by only 1% (or 0.6 percentage points), from 62.5% to 61.9%.

- The results also suggest that as we approach the 21st century the changing demographic conditions will be more favourable for university than college enrolment. In a world where the population is aging, parental education and income are rising, and there are more single people, universities are likely to attract an increasing percentage of those embarking upon a post-secondary education. This, however,

does not necessarily imply that college enrolment will decline, only that the college system's share of post-secondary enrolment may decline.

Related Background Documents Available at Council of Regents

Noemi Stokes and David Foot, Regional Differences in the Determinants of Post-Secondary Educational Choice in Canada: Community College versus University, 1989.

David Foot and Noemi Stokes, University or College? Determinants of Post-Secondary Institutional Choice in Canada, 1989.

Overlap of University and College Part-Time Activities (Project #24)

Findings

- Registrations in part-time courses in the college system are almost double the number in the university sector. About two-thirds of the part-time registrations in university courses are in degree credit courses; universities receive provincial funding for these courses. The other third of registrations are in non-degree credit courses (vocationally-oriented and general interest) and provincial funding is not provided for these courses. About two-thirds of part-time registrations in college courses are in 'vocationally-oriented' courses in which the colleges control the entrance and exit standards; these courses are provincially funded and may or may not be credit courses for college post-secondary diplomas and certificates. The other third of college part-time registrations are in general interest courses and vocationally-oriented courses controlled by organizations external to the college system; provincial funding is not provided for these courses.

Part-Time Registrations in College and University Courses

	College			University		
	Funded	Non-Funded	Total	Funded	Non-Funded	Total
1985	452,838	227,864	680,702	256,285	125,517	381,802
1986	490,265	251,201	741,466	260,477	124,803	385,280
1987	492,422	265,599	758,021	263,909	134,234	398,143

- The different criteria for funding university and college courses (degree-credit versus vocationally-oriented) can lead to the situation in which comparable courses are provincially supported in the college system but not in the university system. This situation is most likely to arise in part-time certificate programs in which an external organization has some involvement but the college or university maintains control over the entrance and exit standards; in such circumstances provincial support is provided for the college courses but not for the comparable university courses.

- Tuition fees for funded (i.e., degree credit) university courses tend to be two to three times the college fee for funded courses, which is $1.50 per instructional hour. Similarly, fees for non-funded university courses tend to be higher than those charged for non-funded college courses; instructors teaching non-credit courses in the universities appear to receive roughly twice the hourly rate paid to college continuing education instructors.

- In terms of assessing overlap between college and university part-time activities, the fact that about two-thirds of the university activity is in the degree-credit area currently limits the potential for a large amount of overlap. Some overlap exists in non-degree credit vocationally oriented courses and general interest courses. The overlap occurs predominantly in the mounting of seminars, course offerings in the business and management development areas, in professional association programs, and in

selected general interest and personal enrichment areas. However, on the basis of three 'case studies' (Seneca College and York University; St. Clair College and the University of Windsor; and Northern and Sault Colleges and Laurentian University), the overlap which does exist does not appear to be causing concern in either the university or college sector. The population base being shared by the two sectors is sufficiently large that where similar courses are offered simultaneously in both sectors, the financial viability of the courses is not being adversely affected and accessibility is being enhanced.

Issues/Implications

- Based on the case studies presented, little adverse duplication or overlap appears to be occurring between neighbouring colleges and universities. The situation should, however, be monitored on a regular basis to ensure that 'inefficiencies' do not develop.

- Given that universities, colleges, and school boards all may offer similar part-time courses, it might assist part-time students if a common calendar were developed which included the part-time courses offered by all three sectors; along the same lines, it might be beneficial to establish 'storefront' information centres at which a prospective student could obtain information on the part-time offerings of each sector.

- The government may wish to examine whether the different criteria it uses for funding university and college courses are appropriate. Should students enroled in essentially the same course pay a higher fee at a university than at a college because funding is not provided for non-credit but vocational university courses ?

Related Background Documents Available at Council of Regents

Teresa Karolewski, <u>Overlap of University and College Part-time Activities</u>, 1989. Also see Teresa Karolewski, Vision 2000 Miniproject #4 - <u>Continuing Education Students at Ontario's Community Colleges: Profiles and Trends</u>, 1989.

College-University Program Arrangements (Project #25)

Background and Findings

- The purpose of the research was to examine the linkages colleges have with universities. In this study the college-university arrangements of greatest interest were those which involved the movement of college students into universities.

- All 22 colleges were sent a questionnaire (19 responded) composed of three forms: Form A was designed to provide an inventory of college-university student arrangements which involved either the transfer of college students to university programs or the joint offering by a college and a university of a program; Form B was designed to collect specific detail on those arrangements identified in Form A; and Form C was designed to collect information on other types of arrangements colleges may have with universities (e.g., the sharing of space or equipment).

- The accompanying table shows the number of program specific arrangements by college and type. Arrangements with Lakehead University are excluded because it has a province-wide general policy for the transfer of CAAT students. In total, 27 arrangements were in operation in 1988, of which 23 were transfer (college to university) arrangements and 4 involved the joint provision of a program by a college and university.

- Of these 27 arrangements, 17 have been implemented since 1979, with 11 being implemented in 1988-89. In addition to the arrangements in operation in 1988, a number are about to be implemented or negotiated; colleges involved include: Durham, Centennial, Conestoga, Georgian, and Niagara.

Number of Arrangements by College and Type, 1988-89

College	Transfer Arrangements (1)	Joint - D (2)	Joint -ND (3)	Total
Algonquin	1	0	0	1
Cambrian	0	0	0	0
Canadore	0	0	0	0
Centennial	1	0	0	1
Conestoga	0	0	0	0
Confederation*				
Durham*				
Fanshawe	3	0	0	3
George Brown*				
Georgian	2	0	0	2
Humber	0	0	0	0
Lambton	3	0	0	3
Loyalist	0	0	0	0
Mohawk	2	1	0	3
Niagara	2	0	0	2
Northern	0	0	0	0
Sault	5	1	0	6
Seneca	0	1	0	1
Sheridan	1	1	0	2
S.S.Fleming	0	0	0	0
St. Clair	2	0	0	2
St. Lawrence	1	0	0	1
Total	**23**	**4**	**0**	**27**

* did not respond

Notes:

(1) 'Transfer' arrangements allow for the transfer of some credits for students or graduates moving from the college program to a university program.

(2) 'Joint-D' arrangements involve the joint provision of the program by the college and university and graduates of the program are eligible to receive a university degree (graduates may also receive some form of college certification).

(3) 'Joint-ND' arrangements involve the joint provision of the program by the college and university but graduates of the program are not eligible to receive a university degree (e.g., the university provides selected courses in a college program for which only a college diploma or certificate is awarded upon successful completion of the program).

• None of the 27 arrangements reported is province-wide in application; each program-specific arrangement is between one college and one university. The only discipline area in which a university has agreements with more than one college is early childhood education; the University of Windsor has two agreements, one with Fanshawe and one with St. Clair, and Brock has three agreements, two with Lambton and one with Niagara. (It should be noted that in addition to these 27 arrangements, Lakehead and Laurentian have province-wide policies on credit for college courses in specific program areas.)

• Thirty percent of the arrangements are with American universities and another thirty percent are with the University of Windsor.

- Most of the program arrangements have been in the 'liberal arts' area and/or in areas that feed the service sector. Business, early childhood education, and general arts and science programs are the program areas in which arrangements are most frequent.

- Under the program specific arrangements, a student completing a 3 year college program generally receives, **at maximum**, credit equivalent to completion of 50 to 75% of a 4 year university program; a student completing a 2 year college program generally receives 2 years of university credit if entering a 4 year university program and 1 year of credit if entering a 3 year university program. American universities tend to provide more credit than do Ontario's universities.

- In addition to information collected on arrangements through the survey, university calenders revealed that where specific college-university transfer arrangements have not been negotiated, the **maximum** credit given to college students enroling in university programs is 5 (the equivalent of one year of university), provided they meet specific requirements.

- In 1986-87, 3.4% (1,362) of **new** university registrants had attended college at some time (about one half of them had a college diploma). In the past decade this percentage has increased by 40 to 50%. In 1986-87, 6.6% (about 3,150) of **new** college entrants (post-secondary) consisted of students who attended university at some time (about one-quarter of them had a university degree). This percentage has increased moderately over the period 1983-84 to 1986-87, with it being 5.8% in 1983-84.

- One of the major reasons for developing arrangements with a university is that arrangements made college programs more attractive to potential students and were seen as a means of increasing enrolment in particular programs; another reason frequently cited was that the arrangements between the colleges and the universities were seen as a means for enabling each institution to contribute what it does best to the education and training of students.

- On the whole neither transfer nor joint arrangements have led to, or required, significant changes in the nature of college programs. Some respondents noted an increased emphasis being placed on 'thinking' and 'communication' skills.

Issues/Implications

- The results of this survey are encouraging in some respects. Colleges and universities are increasingly embarking upon the development of program-specific arrangements; program-specific arrangements appear to make it possible for college students to receive more credit upon transfer than that stipulated in general university transfer policies; and such arrangements do not seem to require significant changes to college programs.

- The findings, however, point to some potentially serious weaknesses of the current "bilateral or *laissez-faire* model" for developing college-university program arrangements. It, at least to date, appears to yield rather limited and quite uneven opportunities for college graduates wanting to enrol in university programs **in Ontario**; arrangements exist for only a limited number of programs; there are very few arrangements in the more technical fields (e.g., technology programs); arrangements for a particular program exist at one or two colleges but not at other colleges offering the program; and arrangements for a given program exist at only one or two universities.

- While the survey respondents were generally in agreement that colleges should attempt to increase the number of arrangements with the university sector, they felt such arrangements should not adversely affect the colleges' ability to serve those seeking the vocational-oriented training traditionally provided by colleges.

- The increasingly rapid pace of technological change suggests the need for arrangements in the area of 'advanced technical' studies (e.g., electrical engineering technology).

- There may be some obstacles which need to be overcome if college-university credit arrangements are to be more widespread; for example, universities may be reluctant to grant credit for academic work over which they have no control, or universities may wish to have some say over college curriculum but colleges might view this as an unwelcome intrusion into their affairs.

- Should the development of future arrangements rely solely on the 'bilateral model' currently in place, whereby individual colleges and universities on their own initiative undertake to develop arrangements? Or, should, for example, a provincial body be created to facilitate the development of college-university arrangements?

Related Background Documents Available at Council of Regents

Robert Alexander Marshall, College-University Transfer Arrangements Existing in Ontario —
    Questionnaire Results, In Colleges and the Educational Spectrum. Colleges and Universities,
    (Toronto: Ontario Council of Regents), 1989.

Awareness and Perceptions of Colleges (Project #27)

Findings

- The findings presented here are based on a survey of 700 general and advanced high school students from across Metro Toronto (including Barrie), conducted in Spring, 1989. The survey was commissioned by Metro's CAATs.

Factors Affecting Choice of Post-Secondary Institution

- Among 31 attributes listed in the questionnaire the most important in selection of a post-secondary institution were:
    - career/job opportunities open to graduates;
    - the success of its graduates;
    - earning potential of graduates; and
    - the reputation of programs in my area of interest;

    Followed by:
    - ease of gaining admission;
    - availability of co-op programs;
    - recommendations of employers;
    - reputation of the faculty; and
    - the institution's facilities/equipment

    The least important were:
    - the opinions of friends and relatives;
    - being able to move away from home to attend;
    - on campus student residences;
    - the opinion of current students; and
    - the physical appearance of the campus. (pp. 57-58)

Impressions of College and University

- Ratings of impressions by high school students of college and university revealed high agreement with the following statements:

    - colleges provide practical training;

    - colleges cost much less to attend than universities;

    - it is much easier to get into college than university;

    - university courses are a lot tougher than college courses;

    - universities give you a more in-depth education than college; and

    - a university degree would be more valuable to me than a college diploma.

- These were followed by relatively high levels of agreement (agree somewhat) with the following:

    - Ontario colleges are highly respected educational institutions;

    - there are thousands of high profile college graduates;

    - colleges are becoming increasingly popular;

    - for the career I'm interested in, a university degree is required;

    - in our high school, universities are promoted more strongly than colleges;

    - I would be proud to tell my friends I am attending a community college; and

    - colleges provide excellent education in many areas not offered at university.

- There was disagreement with the following statements:

    - colleges have a dull student life in comparison with universities;

    - college graduates are more likely to find jobs than university graduates;

    - colleges have no residences for out-of-town students;

    - college graduates advance quickly into leadership positions;

    - colleges are the fast track to the good life;

    - the starting salary for a community college graduate is equal to or higher than a university graduate; and

    - colleges give you more value for your money. (pp. 64-65)

- "Colleges are perceived to provide easier, more practical education than universities (it's not the Olympics of the mind), are reasonably well respected institutions that are becoming increasingly popular, but their graduates are not perceived to advance quickly, have superior earning power or enjoy the good life, which undermines the value perception despite the widespread impression that colleges cost less to attend than university. In other words, one of the colleges' greatest weaknesses is the perceived lack of success of its graduates — the most important attribute in selecting post-secondary education." (pp. v-vi)

- "While perceived likelihood of attending university lags behind appeal of attending university, the opposite is true for colleges ... The greater appeal of university over college is consistent with national data among high school students that indicate 50% want to graduate from university while only 24% want to complete college or technical training." (pp. ii-iii)

Issues/Implications

- Colleges are not viewed in as positive terms as universities by high school students; as a result, there is the danger that, from a societal perspective, a disproportionate number of students are choosing (and will choose) university over college.

- Colleges and the post-secondary sector as a whole should strive to provide college students (graduates) with educational opportunities which will reduce the likelihood of 'career-dead-ending'. Such opportunities might be increased through: (a) greater emphasis on generic skills (e.g., skills - analytical, communication ... which are more easily transfered from one job or occupation to another); and (b) the development of more and better linkages between colleges and universities to provide college graduates greater access to university programs.

Related Background Documents Available at Council of Regents

Burwell Hay, <u>Metro Colleges - Image and Appeal</u>, (a report prepared for Continental Golin/Harris and their client, Metro's colleges), 1989.

In addition, from individual colleges one may be able to obtain results from the following surveys.

College Conducting Survey	Year	Target Groups
Niagara	1986	Sec. School Students; General Public.
Sheridan	1986 & 1988	Sec. School Students; General Public; Teachers & Counsellors.
St. Lawrence-Brockville	1986	Sec. School Students; General Public
St. Lawrence-Kingston	1987	College Students; Adults.
St. Lawrence-Cornwall	1989	Ont.&Que. Sec. Students; General Public.

4. Financial Analyses

College Operating Revenue and Funding Per Student (Project #14)

Findings

Sources of College Operating Revenue, 1979-80 and 1986-87

	1979-80	1986-87	% change in share
	%	%	
Grants - MCU	60.6	56.7	-6.4
Grants - MSD	0.9	6.5	614.2
Grants - CEIC	18.6	13.8	-26.2
Tuition	10.1	9.8	-3.6
College - Educ[1]	1.3	3.8	187.1
College - Other[2]	7.0	7.7	9.7
Miscellaneous.	1.4	1.8	25.9
	100[3]	100[3]	

1. This revenue source consists of revenues colleges have obtained through contracts for educational services and special projects.

2. This revenue source consists of investment income, revenues from the sale of course products, computer revenue, premise rent revenue, and ancillary income.

3. 'Flow-through' funds such as OCAP and Futures student stipends are not included in this breakdown of revenue sources.

Source: Ontario College Information System

- As the chart above shows, the Ministry of Skills Development and college contract education have emerged as fairly significant sources of revenue for the college system. The Ministry of Colleges and Universities continues to be the major source of revenue, although as a percentage of total college revenues MCU's contribution has fallen somewhat. The CEIC (federal government) contribution, relative to other sources, has decreased significantly; this decline coincides with the introduction of the federal government's Canadian Jobs Strategy program in 1985-86.

REAL PROVINCIAL (MCU) OPERATING GRANT PER FTE STUDENT, 1978-79 TO 1988-89. (1981-82 = 100)
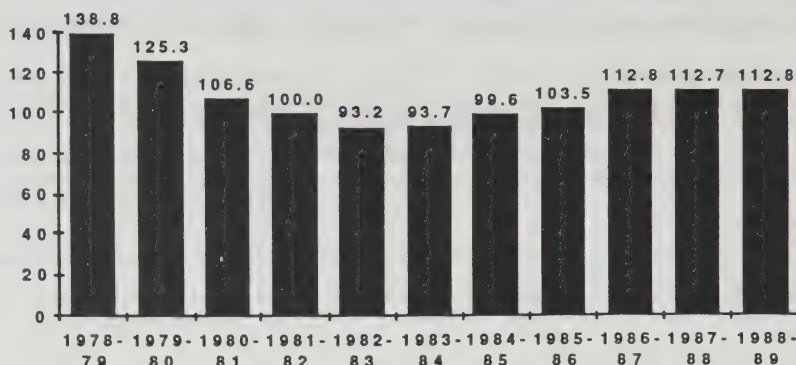
Source: College Affairs Branch, Ministry of Colleges and Universities.

- This chart shows in index form the real (constant $) grant per full-time equivalent student provided to the colleges by the Ministry of Colleges and Universities. This funding is directed mainly towards full-time post-secondary activities, but also supports tuition short activity and part-time vocational activity.

- If nothing else, one can conclude from this chart that the colleges have experienced 'turbulent times' in terms of the real per student funding provided to them for these activities. On the one hand, between 1978-79 and 1982-83, the real grant per FTE declined 33 per cent; on the other hand, between 1982-83 and 1988-89, it increased 21 per cent.

- If the colleges in 1988-89 had been funded at the 1978-79 per student level (the peak level over the period '78-79 to '88-89), the system's MCU operating grant would have been $152 M more or 23 per cent more than that actually provided; if, however, the system had been funded at the 1982-83 level (the lowest level over the period), its 1988-89 operating grant would have been $115 M less or 17 per cent less than that actually provided in 1988-89. This range of funding is roughly equivalent to having the system one year train 'x students' with 'y teachers,' and in a subsequent year train the same number of students with 30 per cent fewer teachers.

Issues/Implications

- The system's ability to fulfil a mandate is affected not only by the level of funding but, also, by the stability of the funding. When one combines the variation in MCU funding with the changing priorities of MSD and CEIC as reflected in the table above, it is not surprising that people within the colleges and others on the periphery of the system are asking what the college system's mandate ought to be.

- With respect to the level of funding several questions arise. Is, for example, the funding currently being provided to the colleges by MCU sufficient to simultaneously: (i) maintain accessibility; (ii) provide remedial courses to post-secondary students experiencing difficulties with writing, reading, and basic mathematics; and (iii) provide students with not only specific occupational skills training but, also, a reasonable general (e.g., liberal arts) education which would assist students in understanding other cultures and the social/economic issues of the day? What indicators are needed to answer this question? And if the answer to this question is in the negative, what should be done? Should the public investment in the college system be increased? Should accessibility be decreased? Or, should the

colleges continue to strive to maintain or increase student numbers within the current funding parameters, recognizing that this limits the training and education provided to the students?
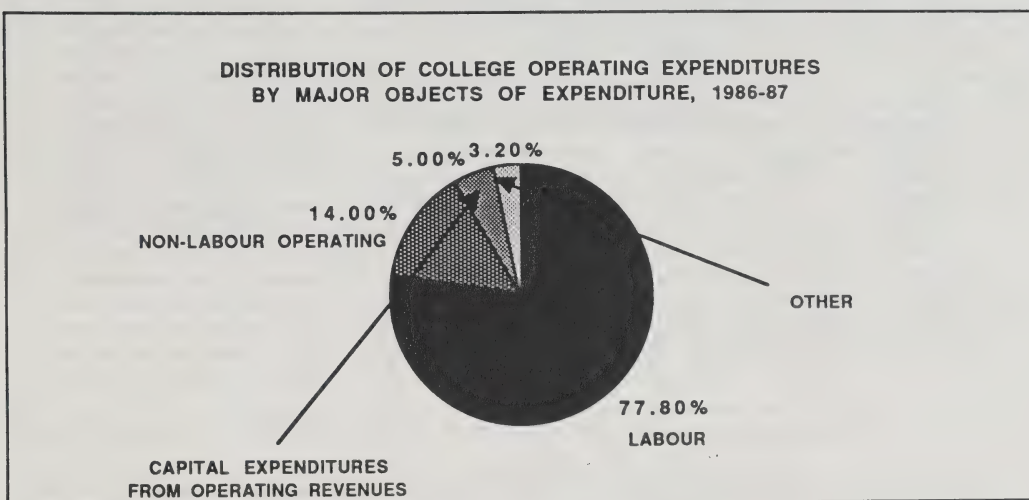
- And, are there ways of bringing greater stability to the funding provided per student which do not necessitate wide swings in accessibility levels?

Related Background Documents Available at Council of Regents

Howard Rundle, Vision 2000 Miniproject #14 - College Revenue and Funding Per Student, 1989.

College Expenditure Patterns, 1978-79 to 1986-87 (Project #29)

Findings

DISTRIBUTION OF COLLEGE OPERATING EXPENDITURES
BY MAJOR OBJECTS OF EXPENDITURE, 1986-87

5.00% 3.20%

14.00%
NON-LABOUR OPERATING

OTHER

77.80%
LABOUR

CAPITAL EXPENDITURES
FROM OPERATING REVENUES

Source: Ontario College Information System

- As the chart above shows, the college system is very labour intensive, with almost 78 per cent of discretionary operating expenditures (all operating expenditures *except* termination gratuities, municipal taxes, approved premise rentals, and student stipends which are supported by specific grants) attributable to staff salary and benefits, contracted labour services, and professional development.

- Labour's share of operating expenditures has increased somewhat since the late 1970s. In 1978-79 labour's share was 76.4 per cent or about 2 per cent lower than in 1986-87.

- Non-labour operating expenditures (e.g., instructional supplies, office supplies, and utilities) accounted for 14 per cent of total operating expenditures in 1986-87. Little variation in this percentage occurred over the period 1978-79 to 1986-87.

- Capital expenses (e.g., equipment and buildings) funded from operating revenues accounted for 5 per cent of total operating expenditures in 1986-87. During the period 1978-79 to 1980-81 these expenditures constituted almost 7 per cent of operating expenditures; between 1981-82 and 1986-87, however, this

percentage has tended to be somewhat lower, falling within the range of 4.9 per cent to 5.9 per cent in all but one year.

Note: In addition to the expenditures colleges make on capital out of their operating revenues, colleges receive specific capital allocations for equipment and buildings. These allocations and the associated expenditures are not reflected in the figures reported above.

- 'Other' expenditures (e.g., ancillary enterprises), which represented 3.2 per cent of total operating expenditures in 1986-87, have fluctuated from a share high of 3.5 per cent in 1981-82 and 1982-83 to a low of 2.7 per cent in 1978-79.

CHANGES IN TEACHERS', ADMINISTRATORS', AND SUPPORT STAFF'S SHARES OF OPERATING EXPENDITURES 1978-79 TO 1986-87
1978-79=100.0
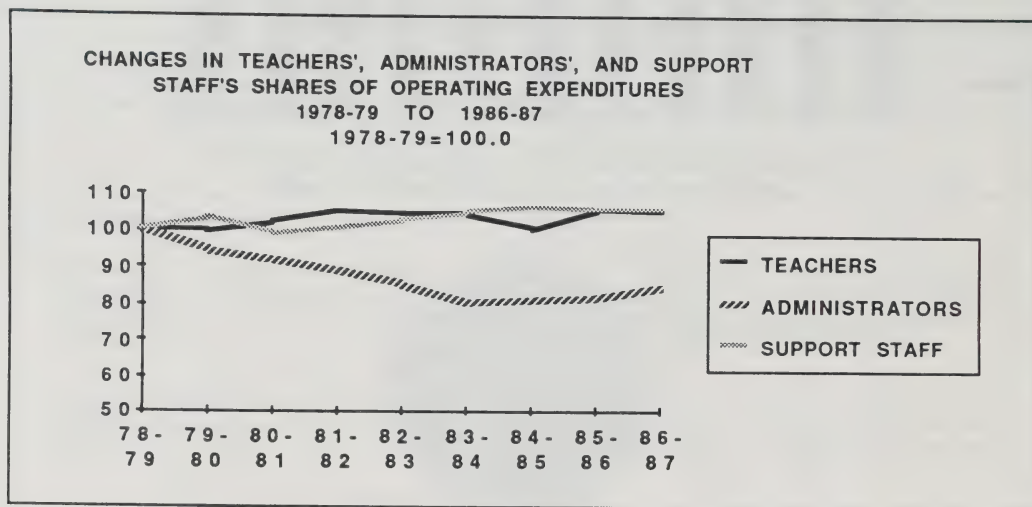
Source: Ontario College Information System

- The chart above shows (in index form) the changes in the teachers', administrators', and support staff's shares of total operating expenditures over the period 1978-79 to 1986-87. The shares of both teachers and support staff have increased since 1978-79, while the percentage of total expenditures related to expenditures on administrative labour has declined.

- The teachers' share increased from 45.7 per cent in 1978-79 to 48.1 per cent in 1986-87, a 5.3 per cent increase and the support staff share increased from 17.6 per cent to 18.6 per cent, or 5.7 per cent; but the administrators' share decreased from 12.6 per cent to 10.7 per cent, a 15 per cent decrease.

Issues/Implications

- Education has always been viewed as a very labour intensive activity and the data on college expenditures do nothing to contradict this view. In fact, even with the advent of computerized learning and administrative systems, the labour intensity of the system has increased since 1978-79.

- While real productivity gains in an education sector are possible, history would suggest that productivity gains in this sector will not keep pace with gains in other more technologically-based sectors. As a result, if college wage rates increase at about the same rate as those in sectors experiencing higher productivity growth, per unit (student) costs in the college sector will rise relative to the per unit costs of other types of production.

- Rising *relative* unit costs of education and training would suggest that governments will always be under considerable pressure to curtail expenditures on the college system. However, when assessing what the public investment in the college system should be, one should, in addition to the rising relative unit costs of education, also take into account that: (i) productivity growth in other sectors does provide a means for paying for the rising relative costs of education; (ii) the education and training provided in the college system is a significant contributor to the productivity growth in other sectors; and (iii) benefits from training and educational investments accrue not only to the individuals undertaking the training but, also, to society at large in the form of a more informed and understanding citizenry. (For an expansion of these arguments, see W.J. Baumol, Economic Dynamics, The MacMillan Company, 1970) The colleges, probably in some collective manner, may need to focus more on assisting the government in informing the public at large of the benefits of public investment in the college system.

- The information and time available do not permit us to comment on whether resources devoted to expenditure items such as instructional equipment and professional development of college staff are adequate to ensure quality training. However, there are some concerns about the manner in which these items are funded by government. In the case of professional development and to a significant extent in the case of instructional equipment, colleges allocate funds to these items from their general operating revenues. In times of financial constraint, college administrators are often faced with the decision of choosing between staff lay-offs and reductions in staff development and equipment expenditures. The natural and quite laudable tendency is for administrators to attempt to minimize lay-offs at the expense of expenditures on staff development and equipment. While such behaviour may minimize the impact of financial restraint on staff morale and accessibility, it may also, in net terms, adversely affect the quality of training being provided, particularly if colleges face prolonged periods of restraint. If a greater percentage of government funds was targeted specifically for professional development and equipment/plant expenditures, the ability of colleges to impose 'forced savings' on these items would be reduced. Although we do not have a specific recommendation to make regarding the method of funding of professional development and equipment purchases, we urge that Vision 2000 explore the advantages and disadvantages of providing, to a greater extent than at present, specific grants for selected (and limited number of) expenditure items of colleges.

Related Background Documents Available at Council of Regents

Howard Rundle, Vision 2000 Miniproject #29 - College Expenditure Patterns, 1989.

5. College Staff

Age Distribution of College Staff and Human Resource Development (Project #15)

Findings

- By the year 2000, over one-fifth of current teachers and administrators will be 65 years or older.

- About 50 per cent of current teachers and administrators will have retired by the year 2005.

- As the year 2000 approaches, the largest number of faculty, in terms of 5 year age groups, will be in the 50-54 year old age range.

Statistics Relating to College Employees' Age Distribution*

Age Statistics as of 1/1/1987	All	Faculty	Support	Admin.	Male	Female
Mean Age	43	44	40	44	44	41
Mode	39	43	38	44	44	40
Median Age	42	43	38	44	44	40
1st Quartile	35	39	31	38	38	38
3rd Quartile	51	51	49	50	52	49
% who will be:						
65 or older in the year 2000	20%	20%	18%	22%	24%	15%
Retiring by 2005 (Assumes average ret. age of 62)	44%	49%	36%	50%	51%	37%

*These statistics relate to the 15,746 full-time employees of the college system who are enroled in the College Pension Plan. Excluded are approximately 400 faculty and 100 administrators who are members of the Teachers' Superannuation Fund; these excluded employees would tend, on average, to be older than those belonging to the College Pension Plan.

- Recently a task force established by the Committee of Presidents completed a study entitled, Human Resource Development in the Third Decade. The study involved 376 college system employees with representation from faculty, administration, support staff, and Boards of Governors. Participants indicated (among other things) that:

    - more opportunities for orientation of new staff and career development of existing staff were needed;

    - specific programs were required to help employees keep their skills current; and

    - performance excellence should be more widely recognized and performance standards should be mutually set, while at the same time managers should be held accountable for the development of their staff.

Issues/Implications

- With the increasing numbers of new faculty who will be hired to replace retiring teachers, some form of 'compulsory' teacher training for all new teachers may be required to ensure that overall standards of teaching do not decline in the college system.

- With increasing numbers of teachers and administrators reaching and moving beyond the mid-point of their working lives, opportunities for these employees to keep current in their fields will need to be provided. More linkages with employers might be developed so that college staff may obtain first hand experience in the changing environments of business and industry.

- The relatively large number of retirements which will occur in the next decade and beyond provide colleges with an opportunity to alter, if indicated, the mix of their employees to better reflect the demographic/cultural characteristics of their student bodies and communities.

- As human resource development expenditures are often among the first to be cut in times of budgetary restraint, the question arises as whether MCU should target some grant funds specifically for human resource development in the college system.

Related Background Documents Available at Council of Regents

Bob Bernhardt, Vision 2000 Miniproject #15 - Age Distribution of Faculty and Human Resource Development, 1989

Study Team 2: Colleges and the Changing Economy

Final Report

Table of Contents

Introduction:

Objectives and Methodology

Study Team 2's objective was to define the economic role of Ontario's CAATs for the future and to propose policy options which will enable the college system to fulfil l that role. The Team members, chosen from a broad range of business, labour, academic and community constituencies, acted as the primary resource for realizing this objective. Supplementary insights were added to the Team's expertise by commissioning five research papers and engaging in an extensive round of consultations.

Our research and consultations confirmed and extended our understanding of the link between education and the economy. More than ever the colleges' economic role is deemed to be a critical component of Ontario's efforts to plan for a fair, equitable and prosperous future.

Taking a cue from many sources, including the Premier's Council On Technology, the Team's workplan set out to examine future training requirements, the impact of technological change, the desire for labour market flexibility, and changes in the composition of the labour force. We gathered information about the role of 'community colleges' in a range of areas, from vocational training to the diffusion of new technologies.

The Study Team discovered that there is a general renewal of interest in education. All sectors of Ontario society, from large manufacturing firms to local community groups in Northern Ontario, are convinced that education is either the best or one of the most important ways to improve our standard of living.

Although we did not expect to find general agreement concerning the content and methods for delivering education, we did discover the extent and range of issues where there was unanimity. Overall, both **our research and consultations reveal a consensus that public education delivered by the colleges must emphasize the provision of 'generic skills' to a broader, more differentiated and demanding student population**. (See the next three sections for detailed definitions and recommendations.)

Naturally, there is controversy surrounding the extent to which economic and educational objectives can be integrated. However, Study Team 2 has discovered

considerable common ground amongst a very wide range of constituencies. This common ground has emerged in large part because of the unprecedented nature and scope of the social and economic changes taking place in Ontario. Our definition and delivery of 'vocational training' is changing as occupational structures, career patterns, and individual needs all change simultaneously and significantly.

By combining the knowledge of labour, business people, college educators, and researchers, Study Team 2 was able to develop an agenda which reflected the economic needs and aspirations of Ontarians. For instance, our consultations helped to formulate a working definition of the educational goals of the college system based upon the needs of students, employers, workers, educators, and community groups. The Team has endeavoured to take the interests of workers in employability and job security, and of employers in productivity, as one of the cornerstones of Ontario's college system. In the end, there was a very broad based consensus regarding most issues and recommendations. However, it is important to note that on a number of items minority opinions were expressed and that this report does not reflect total unanimity on all items.

Purpose and Structure of this Report

The central goal of this Final Report is to assist the Steering Committee to produce a report which the Council of Regents will be able to forward to the Minister of Colleges and Universities. It is also our hope that these recommendations will help the colleges to serve the needs of the public into the next century. With these objectives in mind, the document is divided into six sections. Section 1 presents a series of challenges facing Ontario society. Section 2 offers a set of general strategic choices which address the potential role of Ontario's colleges. Section 3 then provides a series of more specific policy recommendations pertaining to the colleges and the avenues for responding to the challenges along particular strategic lines. All three sections are the outcome of the Team's research, consultation and deliberation. Sections 4 and 5 summarize the results of the Team's research and consultations and offer the reader a guide to the documentation which provides the in-depth reasoning behind the policy conclusions. (Interested readers can request any of the background papers by writing the Ontario Council of Regents.) In the final section, we offer recommendations which go beyond the termination of Vision 2000 with suggestions for further action.

▲ Definition of Terms and Issues

College system or system of colleges?

Since the inception of the Colleges of Applied Arts and Technology the question has been posed as follows: is it a system of colleges or a college system? This dualism counterposes autonomy to centralization. The issue today is more accurately that of cooperation and coordination for the mutual benefit of students and local colleges. In this context it is important to avoid setting up simplistic and irreconcilable choices between centralized authority and local autonomy. More usefully, the issue is how to provide each local college with the additional resources and choices available through system-wide decision-making around such issues as: academic standards, credit transfers, student assessment methods, fee-for-service training, human resource development initiatives, applied research services, and articulation with other components of the educational spectrum. The goal is to respect and enhance the integrity, effectiveness, and accountability of the colleges as learner-responsive and community-responsive institutions within a provincial framework.

Customized access:

This concept refers to the need for individual treatment of incoming students through assessment and personalized tailoring of preparatory courses, program design and delivery, and general counselling. Specific teaching methods, from collective to personalized, should suit the student's needs. The goal is to facilitate access for a very diverse student population while also ensuring that students succeed in completing academically rigorous programs. The aim is to realize 'access with success.' Study Team 4 has dealt with this issue in greater depth. (See Terry Dance, "Access and Quality: Preparatory and Remedial Education in the Colleges," in <u>Challenges to the College and the College System. Study Team 4 Background Papers</u>.)

General education:

"A crucial distinction between general education courses and generic skills courses as now constructed lies in the realm of content. A skills course places its primary emphasis on 'how to' ... how to write essays, how to solve calculus problems, how to find information in a library. For the most part, content is secondary, an adjunct to or practice prop for the development and refinement of a particular skill. True college-level general education courses, on the other hand, place their primary emphasis on content. In retrieving, talking and writing about that content, in shaping, analyzing and evaluating it, students are also required to develop and refine high level generic skills, an inherent by-

product of such general education." (Michael Park, "Expanding the Core: General Education, Generic Skills and Core Curriculum in Ontario Community Colleges," in <u>Challenges to the College and the College System. Study Team 4 Background Papers</u>.)

Generic skills:

"Generic skills are practical life skills essential for both personal and career success. They include language and communications skills, math skills, learning and thinking skills, interpersonal skills, and basic technological literacy. They are not job specific, but are crucial to mastering changing technologies, changing environments and changing jobs. Some generic skills are now taught in discrete courses - communication, mathematics, creativity - while others - critical thinking, problem solving, logic, technological literacy - may be introduced and/or reinforced in courses across the curriculum. Facility in some generic skills - reading, listening, writing, learning - is a prerequisite for success in most college-level courses." (Michael Park)

Polarization and equity:

The research and consultations raised a series of issues related to the polarization of income, skills and life chances. In large measure, the question is whether trends are towards greater or lesser degrees of inequality. Are the changes taking place in the occupational definitions and structure of our economy forcing a growing number of people into the extreme ends of the wage and skill spectrum? Are we moving towards a society of haves versus have nots? Although definitive conclusions regarding the empirical dimensions of this problem are suggested in the research, the consensus regarding the colleges pertains to the positive role for education in avoiding such polarization. Colleges provide an educational means for the diffusion of higher skills and occupational equity. By playing a catalytic role colleges can supply a workforce where the initial structure of earned income is less polarized.

≡ Challenges

1: **Realizing the fruits of technological, economic and social change in an era characterized by greater global interdependence**

> It has become increasingly obvious that governments throughout the world must rethink their economic policies in order to compete successfully in the new global economy because the rapid development of information and communications technology has transformed the marketplace. The key factors in a successful economy are the abilities to develop new technology and to apply it to create new products and processes. This requires a high level of research and development, a literate, well-educated workforce and increasing cooperative initiatives between government, business and labour. (Borins and Holloway)

With the entry of the 'baby boom' generation into the workforce starting in the late 1960s Ontario's colleges took on the task of training young people for an economy dominated by manufacturing, a relatively stable technological base, and careers of almost a lifetime's duration. Today the traditional educational cohort is experiencing a 'baby bust' while the needs of those already in the labour force for some time are expanding rapidly. All workers face significant and on-going changes in the sectoral, technological, and occupational character of the economy. Job content and occupant are now changing repeatedly.

Simply adapting to change will not be enough. Neither firms nor individuals, much less a government in which the public has put its trust, can wait to respond. Initiative offers the prospect of making change a building block instead of a stumbling block. In the 1990s government won't be expected to take the initiative alone. Instead the public sector will be called upon to enable all members of society to seize the opportunities offered by technological, economic, and social change. Cast in the role of facilitator in the information age, it is natural that governments around the globe are putting education into the public policy limelight.

The Premier's Council has articulated the challenge clearly:

> Developing a strong dynamic human resource base is a precondition to sustained economic growth ... One of the key competitive challenges Ontario faces is developing our most fundamental resource: the minds and skills of our workers. (Competing in the New Global Economy, Report of the Premier's Council of Ontario, Volume I, p. 215, 1988.)

Ontario's colleges are positioned to meet this challenge. For workers and employers the colleges are an accessible resource which needs to be effectively integrated into the overall public response to the economic and social challenges facing Ontario. Rooted in the community with a tradition of local responsiveness, the colleges are now ready to build upon the structures of local responsibility and reach out to form a coordinated network. With enhanced collective capabilities the colleges will be able to span the diverse needs of students and society as a whole for a wider and deeper range of skills.

2: Meeting the educational needs of tomorrow's workplace and society

Charged with the task of equipping students with the knowledge needed for Ontario's evolving economy and society, one of the central challenges for the colleges is to ascertain what skills are needed. Study Team 2 devoted considerable time and effort to exploring the dimensions of the educational services employers, employees, and researchers believe colleges should deliver. One of the research papers summed up the college's educational goals as follows:

> In light of the considerable uncertainty about future requirements for specific skills and the increasing importance of workplace centred learning, there is a growing consensus that the educational system should place greater emphasis on the transmission of fundamental skills. The concept of fundamental skills can be construed as having four dimensions:
>
> - analytical problem solving skills;
> - functional literacy;
> - technological literacy; and
> - interpersonal and communications skills.
>
> The challenge for the colleges is to structure these components of fundamental skills into every aspect of their curriculum programming. The range of fundamental skills required by ... technologically literate workers ... cannot be taught as a discrete component of an increasingly specialized curriculum. Rather, they involve fundamental and generic skills that should form the basis of every other aspect of the curriculum. (David Wolfe)

Another research paper captured the educational challenge confronting the colleges somewhat differently, it noted that:

> ... in addition to the 'three Rs,' the colleges need to provide an understanding of technology and its uses, **including** the potential social and human implications of technological change. Such a program nicely combines the two main aims of education: to enhance national economic performance ('efficiency') and to provide all citizens with the knowledge and confidence needed to participate fully in economic and community life ('equality'). It meets the objective of efficiency because a well educated workforce has the kind of 'polyvalent' skills not only to meet current workplace needs but also those of the future, in the service sector as well as in the goods-producing sector. It meets the objective of equality in that it counteracts the emergence of an 'hour-glass society,' where some enjoy stimulating, well-paid jobs while a large part of the population is confined to dead-end, low-wage jobs — with frequent spells on the unemployment rolls. (Rianne Mahon)

For the colleges the verdict is clear. The challenge is to provide education which gives workers the portable and expandable skill base needed to ensure security of employment/employability and the capacity to shift between jobs with different skill requirements. To satisfy employers, colleges must offer education which allows workers to adapt rapidly to changing technology, monitor quality, and improve the production process. Hence the call for colleges to focus on 'generic skills' which serve the needs of students, employers and society at large.

3: Actively encouraging lifelong learning

For years many constituencies, from educators and businesses to community groups and government ministries, have been aspiring to create a 'training culture' and introduce lifelong learning; yet we have failed to ensure a system where educational attainment (formal or informal) is fully valued or where one credential leads easily and fairly to another. As a result students are faced with many barriers which inhibit their investment in further study and often reduce the value of the credentials they work so hard to acquire. The challenge for Ontario's colleges is to overcome these barriers to responsiveness by breaking down the institutional boundaries and democratizing the educational system to ensure effective cooperation and grass roots input.

With a growing demand for education in all aspects of life the colleges must be able to respond efficiently and equitably across a range of needs. One of the

challenges is to balance the demands of local employers and the public at large for short-duration skill-specific training with the broader public responsibility of the colleges to impart the generic and portable knowledge which is needed for the long-run competitiveness of the economy and social well being. Colleges will need to address this wide range of demands through institutional and educational innovation. As one of the researchers explains, the challenge is to adopt and implement 'flexible learning.'

> The term 'flexible learning' tends to be associated with the application of new technology to training **delivery** (e.g., distance learning) or with the introduction of 'training modules.' Both developments can contribute to enhancing the flexibility of the training system and enhanced flexibility is desirable if the **current** workforce is to become substantially involved in lifelong learning. In other words, the colleges will need to continue to experiment with new forms and methods of delivery if their programmes are to meet the needs of those currently in the workforce. Yet flexible learning should mean more than this:

> Flexible learning should be seen as an educational philosophy which advocates an open flexible approach both to current developments and the delivery of programmes; that is, an approach which recognises the role of both teacher and student in deciding what and how to learn, and which also recognises the potential of technology to enhance the **productivity** of teachers and the **quality** of learning....In other words, flexible learning does not mean a fixation on **form** at the expense of **content**, or quantity at the expense of quality. (Mahon)

4: The on-going challenge of realizing Ontario's social and economic goals simultaneously.

Colleges have a crucial role to play in the mutually-reinforcing achievement of both social equity and economic efficiency. In the context of both qualitative and quantitative demographic change there is a powerful convergence of economic need and equity imperatives. The colleges are an important mechanism for linking the highly diverse skills, culture, language, and aspirations of Ontario's population to an equally complex and demanding work world. As explained in one of Study Team 2's research papers:

> Equity and efficiency, then, can simultaneously be served if policies are adopted that encourage the expansion in the social services [public and private] in particular, while putting pressure on the producer and

consumer divisions to upgrade their workforce and thus to reduce the tendency to income polarization. The CAATs can make a contribution here via training and even research support. In all three divisions, the CAATs are particularly well placed to provide the para-professional skills required. (Mahon)

A related challenge confronting Ontario's colleges is to assist with public policy efforts to enhance the functioning of the labour market and move closer to full employment. Specifically, colleges have a role to play in overcoming the mismatch between the growing number of para-professional jobs and the skill profiles of the currently available workforce. The degree of mismatch and consequent need for more effective public policy is even more serious when considering disadvantaged, unemployed and immigrant workers. Consequently, the colleges must accept the task of reaching out to adult and disadvantaged learners in order to impart the generic skills which our economy and society require. As one of Study Team 2's research papers indicates:

> The challenge then is to meet the anticipated demand for high-skilled, flexible workers who can fill a complex range of rapidly changing labour force jobs and volunteer and domestic tasks outside the formal economy. The needs for generic education and training and for a pervasive orientation to lifelong learning stem precisely from the fact that we cannot predict with any degree of certainty the exact future characteristics of these changing jobs and tasks. We can however state with some assurance that they will depend less and less on brute strength, and that employment equity factors will play an increasing role in filling them. We can work to make sure that this is the case. On the supply side, we know that we will have to rely increasingly on educating our existing pool of adults on a continuing basis. Persistently low fertility rates and low immigration rates of those bringing to Ontario the range of skills required will mean that we will be less and less able to rely on vast supplies of new workers to fill the demand for new skills. The economic challenge is to meet this demand.

> The colleges are well-placed to contribute further to the achievement of increased access for all groups within the province and to provide people with basic education and skills. They are particularly attuned to the communities they serve and to the employment requirements of Ontario society. In order to ensure better access to college and more appropriate responses to community and province-wide needs, the colleges will however have to examine closely who now benefits and who in the future could benefit from college education. We cannot afford to waste the potentials of any Ontarians in the just and

prosperous Ontario that those in the colleges can help to shape. (Armstrong and Armstrong)

It is also important to recognize that meeting this socio-economic challenge also implies working to enhance both the perceived and real status of the colleges and college graduates.

5: Working within budgetary constraints while meeting growing needs

In a world of finite resources, colleges already represent a significant collective and individual investment in education. Some of this investment can be accounted for in terms of the dollars spent, but a large share consists of the commitments made by teachers, students, administrators and support staff. Our aim must be to respect and value this investment by striving to serve student demands for accessible high quality education. To meet this dual demand for access and academic excellence within reasonable fiscal limits will require changes in the way we manage our educational investments.

This challenge was posed in a Study Team 2 research paper as follows:

> Regardless of their specific vocation, or their educational background, each ... [element of the labour market] will share the need ... for more fundamental skills and greater technological literacy. The colleges must respond to [worker's] expanding educational needs in a flexible and creative manner. They will have to provide customized learning packages which address the diverse needs of their clients on both the demand (employer) and supply (student) sides of the labour market. In a sense the colleges will need to adopt the same principles for the flexible provision of education that constitutes the best practice frontier of management. The colleges will need to coordinate an increasingly heterogeneous system, but coordinate it in a way that enables strong system-wide sharing of development, standards and innovation, while simultaneously differentiating between the learning needs of various client groups. (Wolfe)

Taking on the challenge of managing Ontario's educational system, and the colleges in particular, in new and innovative ways implies a need to consider changes to the current institutional framework. Other Vision 2000 Study Teams have looked directly at the issue of institutional change within the college system (Study Team 4) and the need for changes in the nature of the linkages between schools, colleges and universities (Study Team 5). For Study Team 2 the economic

vantage point raises the question of involvement by employers, labour, and the community in a provincial process for realizing academic standards and transferability. Here the challenge for the colleges and college system is to find mechanisms which will both gain the insights and find a balance between the interests of different stakeholders.

> Several of those consulted by Study Team 2 have raised the issue of how to reconcile flexibility (and sensitivity to local needs) with quality control (and transferability) via the central imposition of standards. The literature on the current wave of technological and organisational change is suggestive of new ways to secure coordination without recourse to bureaucratic centralisation. This suggests the possibility of establishing a multipartite provincial body, with representation from employers, unions, community groups and the relevant ministries, complemented by local bodies with a similar composition. The provincial board could act as a coordinator and guarantor of basic standards and could develop the latter via a creative dialogue with the local boards. Such a structure would be aimed simultaneously at flexibility/responsiveness to local needs and quality/transferability.

> If Vision 2000 sets its sights on the development of a community college system oriented to imparting technological literacy and the provision of flexible learning, it can make an important contribution to the province's development. Such a 'proactive' stance is not utopian. The wider debate on restructuring within Ontario and Canada as a whole constitutes a 'window of opportunity,' a chance to exercise real leadership in favour of equity **and** efficiency. (Mahon)

Strategic Choices

Every policy process begins from a series of implicit and/or explicit premises. At the outset Study Team 2 considered a series of premises which we believed set the context for policy development. Subsequently, as we explored the issues in more depth it became clear that the current economic and social environment is marked by the major challenges outlined above. These challenges arise from the significant and far-reaching changes taking place in the world around us. Although Vision 2000 is concerned with the fate of the colleges in Ontario, Study Team 2 could not formulate policy responses to these challenges without taking into account the broader questions of socio-economic change.

The strategic directions outlined below situate the colleges in the broader educational, social and economic context. These strategic choices are intended to respond to the challenges outlined in Section 1 and provide a starting point for the specific programmatic and organizational recommendations found in Section 3.

1: Proactive college education policy as an economic and social force

In the context of rapid and global social, technological and economic change, Study Team 2 believes that a proactive college education policy, which includes broad based cooperation with labour, business, community organizations and the public sector, will contribute significantly to the realization of a high value-added economy, a flexible workforce, economic revitalization, equity and social well-being.

2: Setting the primary educational goal of the colleges

In order to serve the needs of all Ontarians, from young high school graduates and immigrants with diverse credentials to the unemployed and adult learners, colleges should aim to enhance the basic ability of each individual to acquire information, reason clearly, think critically, communicate ideas effectively, embrace the 'entrepreneurial spirit' of putting ideas into practice, and be an informed citizen. Meeting this objective must include a significant proportion of general education and generic skills which are required in order to prepare Ontarians for a productive economy and a changing society.

3: Developing an integrated educational spectrum

Study Team 2's research and consultation have revealed that a range of policy initiatives are needed in order to overcome the excessively high costs, to students and other clients of the colleges, that are imposed by the lack of overall academic consistency, flexibility and transferability between academic programs and institutions throughout Ontario's educational spectrum. For the colleges the solutions involve reducing the information and other costs associated with inter-institutional cooperation so as to facilitate credit transfers, improve academic quality, and actively encourage lifelong learning. The time has come to introduce a network which will coordinate resources more effectively and allow for greater collaboration and collective decision-making with all of the various stakeholders.

4: Realizing greater social equity and economic efficiency

Given the extent of qualitative and quantitative demographic change taking place in Ontario, colleges will need to play a major role in realizing the mutually reinforcing aspects of social equity and economic efficiency. Colleges are well placed to encompass both objectives by providing one of the major links between the diverse skills, culture and aspirations of Ontario's population and the equally complex and demanding world of work. This linkage can only be realized if colleges are learner centred in a way which improves the effectiveness of the educational process, as measured by retention rates and academic standards, for a very diverse set of clients. Colleges must continue to be educational innovators in order to take into account each student's unique cultural background, job history, and future prospects.

5: Delivering education with finite resources

Realizing the combined objectives of customized access and academic excellence within reasonable fiscal limits will mean that colleges, like business, labour and government, must work to increase organizational effectiveness. The colleges, as a whole, will need to take advantage of the information age, advancements in participatory managerial practice, and representative structures which incorporate the insights and needs of a diverse group of stakeholders. By using the strengths of a networked structure, which allows for more developed coordination than is currently the case, the college system will be able to realize academic excellence and

efficiency in ways which enhances decentralized access to advanced skills, teaching methods, and credentials.

Policy Recommendations

Given the challenges and strategic choices outlined above, this section provides a series of more specific programmatic policy options. Not all of these recommendations need be adopted together. The intention here is to offer Study Team members and the Steering Committee the choice of a variety of implementation methods for realizing the public policy objectives for the colleges and the college system.

▲ **1** Recommend that in the context of the Premier's Council's efforts, the Ontario Government explicitly include the college system as an active participant in the effort to pursue a high wage, high productivity economic strategy.

▲ **2** In the context of province-wide undertakings such as the strategies being initiated by the Premier's Council and the calls by many clients of the colleges for academic standards and credit transferability, it is time for a significant increase in collaboration and coordination amongst all 23 colleges. Therefore, Study Team 2 recommends that the colleges establish a collective mechanism, with a fully representational structure, which will be capable of developing, articulating, and implementing a provincial role — as an economic and social partner - for the college system as a whole. (The representational structure should encompass the college community of administration, faculty, support staff, and students, and the community at large with direct involvement by labour, business, and organizations which represent specific student target groups, e.g., immigrants). The capacity to provide system-wide responses and initiatives is a necessary premise if the colleges wish to coordinate resources in an efficient manner and be invited to take on the role, of which they are capable, in provincial efforts at economic and social development. Introducing a provincial college network should complement not compromise both the academic integrity of each college and the local and regional responsibilities of the colleges.

▲ **3** Recommend that the Ontario Government recognize and promote the role of coll education in an economic strategy which aims to avoid income po ation by engaging in occupational and educational upgrading across all sec...s of the economy. By providing skill upgrading and education applicable to all sectors of the economy, colleges can play an important part in

avoiding a situation where the workforce is polarized on the basis of income and skill levels. Government policy should recognize the importance of skill upgrading both within sectors and across sectors as a crucial part of a strategy to actively promote equality and a dynamic, flexible economy.

▲ **4** Recommend that the Ontario Government set the mandate of the college system so as to ensure that the *primary* goal is to provide 'generic education' for all students regardless of type or duration of program. A basic definition of generic education encompasses the following components: "... practical life skills essential for both personal and career success ... including language and communications skills, math skills, learning and thinking skills, interpersonal skills, and basic technological literacy. They are not job specific, but are crucial to mastering changing technologies, changing environments and changing jobs. Some generic skills are now taught in discrete courses - communication, mathematics, creativity - while others - critical thinking, problem solving, logic, technological literacy - may be introduced and/or reinforced in courses across the curriculum." (Park) The intent is to ensure that skills training educates students beyond the narrowly defined needs of a particular job and leaves the trainee better able to take on different tasks in the future. This should be the case whether the program lasts two hours or two years.

▲ **5** Recommend that "the Ontario Government establish an Office of Applied Research within the Ontario college system. This office would have a number of tasks, including the development of a registry of faculty and staff willing and qualified to carry out research; establishment of an information and assistance program for faculty and staff wishing to gain access to funding for research; administration of a research fund to support a small program of grants for faculty and staff, seeking partners from the business, labour, government and non-profit sectors for collaboration in college-based research activities; and development of an applied research agenda for the entire college system." (Borins and Holloway) This proposal is intended to enhance the primary function of the colleges, which is teaching, and does not overlap with the kinds of research properly carried out within the university setting. The main aims of this recommendation are to improve morale and job satisfaction within the colleges and ultimately increase the quality and

relevance of instruction at the colleges as well as contribute to socio-economic innovation and technology diffusion in the college's community and region.

▲ **6** Recommend that the Ontario Government establish an Institute for Innovation in Educational Software as a joint venture between the colleges, the software industry, and all of the relevant government ministries. Three important reasons have emerged for this initiative: first, the growing importance of innovation and diffusion of educational software as an instructional tool, especially in a period of increasing demand for education in all areas of life; second, the need to build upon the existing technical strengths of the colleges, as repositories of teaching expertise, and the software industry, as application innovators, by encouraging cooperative ventures; and third, to help sustain the leading edge characteristics and overall viability of the educational software sector through the development and mass marketing of products. Naturally, careful consideration must be given to ensuring that joint ventures do not generate unfair competition and respect the different objectives of the public and private sectors.

▲ **7** In light of the need for major increases in the scope and scale of lifelong learning, it is time for the colleges and the educational system in general to facilitate further initiatives in areas such as credit banking, flexible and efficient methods for establishing credentials, inter-institutional and intra-institutional transferability, and academic consistency. Beginning from the premise of respecting the integrity of all educational institutions, including all 23 colleges, Study Team 2 considers that it is time for the colleges to become a college system for the purposes of planning, assessment and academic credibility.

▲ **8** In order to realize the advantages of system-wide academic standards the Ontario Government should direct the colleges to establish a framework for accountable system-wide academic self-governance by establishing a representative body composed of the college academic staff, college administrations, trade unions, employers, community representatives, and the relevant government ministries responsible for education and labour markets.

▲ **9** Recommend that the Ontario Government undertake to ensure that the colleges implement a broad based, with strong stakeholder participation, system-wide program of human resource development aimed at ensuring that faculty are prepared to meet the teaching challenges of the future, particularly those of adult education. In addition to the internal programs established within the college system, this effort should take into account the need for exchanges between different sectors of the educational spectrum and between the private and public sectors as well. It is time to facilitate and provide incentives for a sharing of human resources that allows for a greater circulation of educators amongst community organizations, private firms and all components of the public educational spectrum.

▲ **10** The simultaneous need to improve academic quality and expand access with success for a more diverse and demanding student body means that the colleges need to introduce a wide variety of customized preparatory strategies founded upon consistent and effective evaluation mechanisms. Therefore, in the interests of access and academic standards, it is time for the Ontario Government to provide direct encouragement for the introduction of a universal and coordinated approach to preparatory and remedial education in the colleges.

▲ **11** Recommend that the college system establish provincial academic program planning committees on a sectoral basis with the participation of labour, employers and sectoral associations with the aim of facilitating long-range regionally sensitive planning, province-wide specialization and coordination, quality assurance and innovation, and special labour force adjustment programming.

▲ **12** In order to facilitate the process of entry, transfer, and cooperation amongst educational institutions in a way which reduces information costs for students and employers, the college system must establish consistent academic standards. These standards should respect the specific needs of local communities and the integrity of curriculum development as a participatory process led by academic staff.

▲ **13** Recommend that the Ontario Government and the college system collaborate to ensure that funding formulas and academic reward structures offer

systematic incentives for the development and delivery of flexible, modular, non-institutionalized, innovative education.

▲ **14** Recommend that the Ontario Government delegate the role of college level credential certification and the associated accreditation, to a representative provincial body which will integrate and pursue the interests of students, employers, workers, faculty, and the community at large in high quality education. Credentials are the means of assigning value to educational achievement. As such, credentials are subject to rigidity, inflation, and unnecessary exclusivity. The public has a right to expect high quality credentials that reflect social needs and values as accurately as possible. By providing a mechanism for balancing the conflicting interests of these different constituencies the government will help to introduce greater flexibility and more accurate valuation of educational experience.

▲ **15** Recommend that the Ontario Government, in conjunction with our educational institutions, establish a means for providing college graduates with opportunities for further professional development utilizing teaching methods which combine appropriate amounts of practical and theoretical learning. A number of factors indicate that there is a need to introduce a new range of advanced professional credentials based upon a college oriented method of instruction that combines practical and theoretical work. Study Team 2 heard requests from employers and employees for opportunities to upgrade credentials beyond the college level but without moving into the preponderantly theoretical realm of the universities. Although the exact fields and institutional configuration require detailed study, it is time to respond to the demand for educational credentials beyond the college graduate level and which combine the resources and expertise of colleges, universities, the community and industry.

▲ **16** Study Team 2 recommends that the college system engage in a formalized process of articulation with the schools and universities so as to ensure that all students are better informed about their educational choices and receive appropriate and fair credit for their educational achievements. Developing clearer and less cumbersome linkages between the different components of the educational spectrum is one of the most effective ways for the government to increase both the value of, and open up more avenues to,

educational achievement. This is especially true for young students just beginning to plan their educational future and the many workers who now wish to improve upon their educational achievements.

▲ **17** Recommend that the Ontario Government work with the college system to introduce guidelines which facilitate college delivery of fee-for-service training. These guidelines must clearly distinguish between publicly funded and fee-for-service activities. The goal is to maintain the integrity of the different functional and financial roles and avoid any conflict of interest which might arise from 'unfair' public subsidies. In particular, it is important to avoid addressing specific training deficiencies by adjusting the goals and standards of public academic institutions. This means that part of the effort to distinguish between fee-for-service and publicly funded education involves a distinction between economic or industrial policies aimed at assisting specific sectors or firms with labour upgrading and basic educational policy. By respecting these distinctions it will be easier for colleges to expand fee-for-service training without compromising their public mandate or accountability.

▲ **18** Recommend that the colleges establish a provincial 'clearing house' to coordinate, market, and develop 'fee-for-service' training (perhaps in conjunction with the Ontario Training Corporation) with the aim of both facilitating access to job-specific training and initiating new entrepreneurial activities in the training field. This type of partnership endeavour must work within guidelines established for safeguarding the primary educational goal of colleges which, as public institutions, is to provide students, in all forms of education and training, with generic skills.

▲ **19** Given the importance of applied research, joint ventures with private and public sector partners, development and outreach around job specific/cost recovery training, that the colleges introduce institutional mechanisms, such as the college training 'corporations' found in other jurisdictions, which promote and coordinate these activities.

▲ **20** In light of the important benefits, such as improved linkages between colleges and the community, which result from cooperative education administered in a way which respects the college's primary academic role, it is time for the

college system and the Ontario Government to initiate a coordinated approach towards encouraging and regulating the application of cooperative educational modes in a wider range of courses and worksites.

▲ **21** Recommend that the Ontario Government address the issue of providing better access for the employment disadvantaged who wish to gain new skills at the college level. The implementation of these programs should be jointly administered at the local level by the colleges, employers, trade unions and community groups in order to take into account regional needs, special target populations, and the need for improved coordination.

▲ **22** Recommend that the Ontario Government and college system cooperate in the establishment of regional and sectoral education committees with the aim of ensuring appropriate specialized services and accessibility on a regional basis.

▲ **23** Recommend that the college system attempt to reduce unwarranted duplication, provide mechanisms for enhanced accessibility to a wider range of courses, credentials and programs within a framework that streamlines managerial hierarchies, introduces system-wide integrated information systems, fosters academic specialization where there is a clear local and/or provincial need, and aims to provide flexible, low overhead education.

▲ **24** In order to address the need for greater investment by Ontarians in workplace training, Study Team 2 recommends that a joint government, labour, business and college task force be established to examine various incentives and potential funding options.

▲ **25** Applied research and professional activity with industry, the social service sector, government, and community organizations plays a vital role in keeping the skills and knowledge of college faculty current. Study Team 2 recommends that the government take steps to encourage these activities through such methods as donations of up-to-date equipment and staff exchanges with all sectors.

Summary of the Research

The Study Team commissioned five research papers on issues which emerged from our discussions of the premises and challenges facing the colleges. Generally the research was intended to respond to a number of basic questions. First, what role if any did Ontario's colleges have with respect to efforts to realize an economic and social well-being? Second, what exactly are the skill requirements of today's economy? Third, do colleges have a particular role to play in the process of technological change and the diffusion of new technology? The fourth and final topic called for an examination of the relationship, or trade-offs if any, between social equity and economic efficiency.

The Executive Summaries of all five articles are provided below. The original articles are available from the Council of Regents. *Please note that these papers are the work of independent researchers and the opinions expressed do not necessarily represent the views of Study Team 2 members.*

Rianne Mahon
Toward a Highly Qualified Workforce:
Improving the Terms of the Equity-Efficiency Trade-Off

That the Canada-U.S. free trade agreement will accelerate the restructuring of the Ontario and Canadian economies is not in dispute. There is, however, rather less agreement as to the kind of restructuring that should be encouraged and the kinds of policies required. In this paper it is argued that the current debate on restructuring constitutes a "window of opportunity" for the Province, a chance to develop policies designed to improve the terms of the equity-efficiency trade-off by developing a highly qualified workforce. Although Vision 2000's mandate is to re-think the role of Ontario's community colleges, the recommendations it makes will have a far-reaching effect. The community colleges can be reorganised to fit into the 'hour glass' society that is emerging to the south. This seems to be the direction currently favoured by federal policy. Alternatively, they can be structured to supply the workforce with the kind of skills required to revitalise the goods-producing sector and to promote the development of a high quality, dynamic service sector capable of paying good wages.

The first section of the paper surveys developments in the goods-producing sector and concludes by supporting the basic thrust of the Premier's Council's report,

Competing in the New Global Economy. The second section takes a more careful look at the service sector, arguing that if the community colleges are permitted to expand their programmes for training para-professional workers, they can make an important contribution to the development of a dynamic, high wage service sector. The third section critically examines the current federal training initiatives while the last section tries to spell out the basic principles that should inform Vision 2000.

David Wolfe
New Technology and Education: A Challenge for the Colleges
The economies of the industrial countries are undergoing a period of profound economic adjustment. Patterns of industrial production, international economic relations and the consensus over accepted approaches to economic policy are all in a state of flux. This period of economic change is also characterized by an anomalous combination of persistent unemployment and critical skill shortages in a range of occupations.

The present period of economic dislocation involves a process of invention and experimentation in the search for new technologies and new forms of production and distribution. Although technological innovation is a regular feature of industrial economies, the magnitude of the current dislocation results from the pervasiveness of the innovation underway. Shifts of this magnitude have occurred only three or four times previously in the history of the industrial economies.

Some observers have characterized the changes we are currently experiencing as a new technological revolution or the emergence of a new techno-economic paradigm. What distinguishes a technological revolution from lower orders of technological change is the specific set of characteristics associated with its most important input, or key factor. The key factor is characterized by a low and rapidly falling relative cost curve; a virtually unlimited source of supply over long periods of time; and an obvious potential for its use or adoption as a factor in a wide range of products and processes throughout many branches of the economy. A recent investigation conducted for the OECD by a group of experts concluded that there is only one set of technologies today that meets these criteria for the key factor in a new technological revolution: microelectronic-based information technologies.

The emergence of a new techno-economic paradigm requires a corresponding shift in a range of other social and political institutions to facilitate the effective

diffusion and adoption of the new technologies. Of critical significance for the present investigation is the availability of a labour force with the appropriate mix of skills and occupations. The implications of the new techno-economic paradigm may call for an adjustment of the skill profile at all levels of the workforce. On balance, the trends associated with the managerial common sense of the new paradigm are towards higher and broader levels of skill and for greater flexibility in the way that skills are deployed in the labour process. The overall emphasis is on flexibility in the use of new technology across all sectors of the economy. The need for greater flexibility arises from the quantum increase in the computer-mediated nature of work. The spread of information technologies requires individuals in a wide range of jobs to accomplish their work through the medium of an information system, rather than through direct contact with the object of the task.

The growing interposition of information systems between operators and their work process means that their relationship with that work process becomes far more abstract and formalized. Workers in such a cybernated system require skills which are defined as a general ability to understand how a system functions and to think flexibly in trying to solve problems.

The rapid pace of change associated with the new techno-economic paradigm make it unlikely that the skills acquired by students in their primary or secondary education will remain adequate throughout the entire course of their working careers. Workers must be prepared to adjust their skill levels and acquire related skills on an on-going basis. Post-secondary institutions, particularly the college system, will face a challenge in deciding what kinds of training to provide for which categories of labour market entrants or members of the active workforce.

In light of the considerable uncertainty about future requirements for specific skills and the increasing importance of workplace centred learning, there is a growing consensus that the educational system should place greater emphasis on the transmission of fundamental skills. The concept of fundamental skills can be construed as having four dimensions:

- analytical problem solving skills;
- functional literacy;
- technological literacy; and
- interpersonal and communications skills.

The challenge for the colleges is to structure these components of fundamental skills into every aspect of their curriculum programming. The range of fundamental skills required by the technologically literate workers of the new paradigm cannot be taught as a discrete component of an increasingly specialized curriculum. Rather, they involve fundamental and generic skills that should form the basis of every other aspect of the curriculum. The colleges will also need to customize their learning packages to meet the diverse needs of a wide range of client groups. In effect, they will need to adopt the same principles for the flexible provision of education that constitute the best practice frontier of management in the new techno-economic paradigm.

Peter Warrian
Industrial Restructuring, Occupational Shifts and Skills: The Steel and Electronic Manufacturing Cases

Recent changes in skill requirements and occupational composition in the steel and electronic manufacturing industries may be considered representative of future skills development in Ontario's industrial economy. These will set the framework for the training requirements in the economy of the 1990s. Ontario's Community College system will be challenged to re-consider its structure of delivery, emphasis and methods of teaching in order to meet them.

Restructuring driven by international market forces or technology as an opaque, if not invisible hand, cannot be assumed to produce the value-added restructuring necessary for the Ontario economy to sustain the social environment the Premier's Council has endorsed. Active labour market and training policies will be vitally necessary if the goal of enhanced value-added production in Ontario is to be realized. It is within these broad international economic and technological forces that the Community College system can contribute to positively enhancing value-added production by helping provide an adequately and currently skilled work force to drive the economy of the future.

As this paper points out, the analysis of the dislocated worker labour market problem has established that internal and external labour market issues cannot be separated. They are but aspects of the same issue. This means in turn that the upside and the downside labour market adjustment issues are also the same. The re-skilling or up-skilling of the work force is necessary to both the realization of an enhanced value-added goods producing sector for the Ontario economy and to ease

the negative impacts on workers of industrial restructuring. In addition, the colleges have an important proactive role to play in altering the training culture by supplying education and initiating occupational/credential changes which diversify the internal labour market in a way that enhances value added.

There have been important occupational shifts taking place in recent years in both the steel and the electronic manufacturing industries. In both cases, 'knowledge intensive' occupations tend to gain, while 'labour-intensive' occupations have been losers in both industries. Within the production workforces, the traditional electro-mechanical skills have been in decline while electronic and information-related skills have been in the ascendancy.

The following general conclusions are supported by the results of field interviews.

1. The first task is to equip the current and future workforce with a solid base in the fundamental skills of literacy, numeracy, communications and problem solving.

2. The Colleges in their technology and other vocational training activities should concentrate on giving a good grounding in applied generic skills. The application and firm-specific training should be left to individual firms.

3. Colleges may co-operate in delivering short-burst, customized training in co-operation with local industry for both general upgrading and specific applications.

4. In spite of the general patterns of up-skilling, industrial restructuring will also have a labour adjustment downside effecting specific localities, occupations and industries. The role of the College in these cases should be the enhancement of the portable fundamental skills and generic applied skills that these workers will need to be re-employed.

Sandford Borins and Shirley Holloway
Meeting the Competitive Challenge:
Enhancing Applied Research in Ontario's Colleges

It has become increasingly obvious that governments throughout the world must rethink their economic policies in order to compete successfully in the new global economy because the rapid development of information and communications technology has transformed the marketplace. The key factors in a successful economy are the abilities to develop new technology and to apply it to create new products and processes. This requires a high level of research and development, a

literate, well-educated workforce and increased cooperative initiatives between government, business and labour. This paper examines some aspects of the role which community colleges can play in the creation of a Canadian society able to maintain a high standard of living in the competitive global economy. More specifically, it argues that applied research should be a part of the community colleges' mandate. The two major reasons are that this would improve the pedagogical capabilities of the colleges and that it would enable the colleges to contribute their expertise in responding to the need to improve Canada's performance in research and development.

The focus group discussions carried out by the Vision 2000 Study Team 2 made it clear that business interests are concerned that faculty members remain current in their fields so that students will receive appropriate, leading edge instruction. The general consensus is that active participation in research and development would support the quality of the institution's teaching.

The concept of carrying out applied research in the colleges is not new and an examination of initiatives already undertaken shows that there is a proven record of success. Most of the instances cited exemplify a high degree of cooperation between colleges and businesses or other agencies and/or consortia which ally universities with colleges and business. A wide range of interests is covered by these partnerships and they are most often built on the foundation of local economic interests and the expertise of staff members in the educational institution. The outcomes of such applied research have ranged through the development of new products or processes, resulting in increased local employment opportunities, new delivery methods for established curricula, introduction of leading edge technology into the curriculum, establishment of new businesses and help to existing companies in adjusting the capabilities of their labour force to meet new demands. Some applied research undertaken by colleges has aided the entry of non-traditional students into the formal educational setting and one case is cited of work which has led to improved educational possibilities for the disabled.

An examination of a recent survey of faculty members at Ontario colleges by Stephen Bell shows that many faculty in community colleges are already engaged in some form of applied research, and it is clear that there is an appetite to continue to expand this interest.

Although community college faculty are constrained to some extent by the limitations of their contracts and also by funding availability, the authors present recommendations that would enable research to be carried out within the current system on a cost-effective basis. Central to these recommendations is the establishment of an Office of Applied Research within the Ontario College System. This office would have a number of tasks, including the development of a registry of faculty and staff willing and qualified to carry out research; establishment of an information and assistance program for faculty and staff wishing to gain access to funding for research; administration of a research fund to support a small program of grants for faculty and staff, seeking partners from the business, labour, government and non-profit sectors for collaboration in college-based research activities; and development of an applied research agenda for the entire college system.

The proposals do not detract from the primary function of the colleges, which is teaching, and do not overlap with the kinds of research properly carried out within the university setting. They do provide support for applied research because it will improve morale and job satisfaction within the colleges and ultimately increase the quality and relevance of instruction at the colleges as well as provide social economic benefits to the community.

Pat Armstrong and Hugh Armstrong
Choosing Equity and Prosperity: Access to College and the Ontario Economy
Almost all who are disadvantaged by reason of class, sex, race and ethnicity, language, age, geographical location, or physical capacity, or just plain luck, have the legitimate desire to better their situations and the situations of individuals in their households and other groups. This desire, it is argued, is consistent with the requirements of a rapidly changing formal economy and of its rapidly changing relations with the domestic and volunteer sectors where production also takes place. There exists a happy coincidence between our democratic equality and economic efficiency impulses.

The accelerating pace of economic change and the strategic choice to favour high-value-added, high-wage labour force activity demand workers who can learn rapidly and who have high skill levels. These demands in turn require increased access to education, much of which the colleges are well placed to provide. They are widely

dispersed across the province, and are particularly attuned to the communities they serve and to the employment needs of Ontario society.

Although the colleges have contributed substantially during their 20-odd years in existence to making post-secondary education more accessible, much remains to be done to tap the potential of individuals from all segments of Ontario society as we prepare for the economic challenges of the next century. Simply put, we cannot afford to waste that potential.

The core section of this paper addresses the issues affecting labour force supply. More specifically, it focuses on the barriers to equal access that still confront disabled persons, older workers, women, the poor, and members of diverse racial and cultural groups, including Native Peoples and first-generation immigrants.

Other sections of the paper sketch recent trends in the characteristics of the college student population, factors affecting the demand for labour, and aspects of the public policy context that particularly influence the supply of and demand for labour. Acknowledging the contributions that employer-based training and short courses and counselling from community-based agencies can and must make, the paper argues that on the mutually-reinforcing grounds of equity and efficiency the colleges have a central contribution to make in the provision of general education, generic skills and high-level career-oriented programs to a broader range of Ontarians.

Summary of the Consultations

Vision 2000 is predicated on consultation. The consultative task was divided up according to the issues and constituencies relevant to the study team. This approach was adopted in order to make sure that the consultations were both representative and conducted in a manner which best suits the constituencies being consulted. Study Team 2 undertook a consultation process with selected employer and employee representatives from across Ontario, to seek their views on the economic role of the community colleges.

Common points arose in each of the 12 'focus groups,' and other points were raised frequently or emphasized strongly.

1. General Comments

- The changing economy requires more highly qualified workers
- The work force is not well enough educated and trained
- Therefore, there are occupationally and regionally specific shortages of skilled labour
- Positive attitudes towards lifelong learning are needed
- Mobility in the workforce and flexibility in education and training are needed
- A coordinated approach among educational institutions, governments, employers, and employees is recommended to solve these problems.

2. Common Themes

The degree of commonality on the key issues was extensive and indicated the following three common themes:

a) Generic skills

- Every group strongly expressed the need for better general education and skills training — termed 'generic skills'
- These skills include written and oral language skills, numeracy skills, general technical skills; as well as the ability to think, to learn, to analyse and problem-solve; and interpersonal skills
- The publicly-funded colleges should be responsible for teaching these portable skills

- Employers should take responsibility for job-specific training -- which could be provided by colleges, but funded by employers
- It is essential that workers have the ability to be trained and retrained.

b) College-wide 'system'

The need for a college-wide coordinated system was identified in order to respond to issues consistently across the province. Some of those identified were:

- Common standards to assist employers in recruiting are needed
- Common credentials are needed for the same reason, and to give value to students' knowledge
- Greater transferability of credits, both between universities and colleges and between individual colleges
- Improvement of opportunities for disadvantaged groups, for which the colleges have a social responsibility
- Upgrading/retraining/teaching adults requires some different approaches in teaching and flexibility in courses
- Cooperative work/study programs, carefully managed, are encouraged
- Planning of educational needs with various business sectors.

c) Public Education

- There is strong support for the colleges to remain as public institutions
- Employers say they have to take more responsibility for training but want to work closely with the colleges
- Trade unions and community groups say that education should be 'learner-driven'

3. Other Issues

Several other issues were raised frequently, often with emphasis:

- College teachers need more workplace experience
- Confusion between federal and provincial jurisdictions needs to be sorted out
- Employers would like the rigidity between colleges and universities broken down; the unions like the colleges as distinct institutions
- Accessibility must be improved through, e.g., better financial support, services, attention to special needs
- The image of blue collar work should be improved and the colleges can help

- Employers and employees are eager to consult on program and course development
- Francophones have special needs, including measures to encourage higher participation rates in post-secondary education
- Northerners have special needs, mostly arising from a different population mix and the vast distances of the North
- Trade unions and community groups believe the needs of students for portable skills and reduced barriers should take precedence over job-specific needs of employers
- Applied research which is mutually beneficial to the colleges and economic growth should be looked at.

Concluding Observations

Study Team 2 recommends that the Steering Committee initiate a round of informal consultations with major educational constituencies in order to inform them of the emerging results of Vision 2000 and solicit their suggestions for amendments or additions.

Study Team 2 urges the Steering Committee to call upon the Federal and Provincial governments to undertake a national assessment of education, with the aim of providing a more integrated and effective national educational infrastructure.

Appendix 1: Members of Study Team 2

Hugh Armstrong,
Associate Dean, General Studies,
Centennial College

André Bekerman,
Senior Negotiator,
Ontario Public Service Employees Union

Gordon Betcherman,
Project Director, Employment,
Economic Council of Canada

Kris Gataveckas,
Vice-President of Development,
Humber College

John Huot,
President, Faculty Union, OPSEU Local 562,
Teaching Master, Social Work, Humber College

Louis Lizotte, (replaced Pierre LeBlanc),
Senior Analyst, French Language Services Section
Ministry of Colleges and Universities

Hugh Mackenzie,
Research Director,
United Steel Workers of America

Janet Mason,
Manager, Policy and Planning Branch,
Ministry of Skills Development

Riel Miller, Executive Officer,
Manager of Policy and Research
Ontario Council of Regents

Milton Orris,
Dean, Continuing Education Division,
Ryerson Polytechnical Institute

Jacqueline Robertson,
La Cité Collégiale

Tayce Wakefield,
Manager, Government Relations Staff,
General Motors of Canada Ltd.

David Wolfe,
Associate Professor, Department of Political
Science, University of Toronto

Robert Arn,
Educational Software Products,
Meridian Technologies

Jim Bennett,
Vice-President and General Manager,
Canadian Federation of Independent Business

Sandford Borins,
Professor, School of Administrative Studies,
York University

Sam Gindin,
Special Assistant to the President,
Canadian Auto Workers

Steve Krar,
Consultant Kelmar Associates

Mike Lyons,
President, Impact Labour Representatives

Lorna Marsden, Chair,
Professor, Department of Sociology,
University of Toronto

Ron McGinley,
Director, Demographics and Social Economics
Branch, Ministry of Treasury and Economics

Neil Nelson,
Management Consultant, Past President,
Ontario Society for Training and Development

Gary Polonsky,
President, Durham College

Susie Vallance,
Education Employment Equity Officer, Seneca
College

Peter Warrian,
Labour Economist and Consultant

Meeting dates:

- January 25, 1989.
- February 16, 1989.
- March 29, 1989.
- July 11, 1989.
- September 13, 1989.

Study Team 2 Consultations:

	Sector	Date	Location
1.	Manufacturing	May 17	General Motors, Oshawa
2.	Public and non-profit	May 26	University of Toronto, Toronto
3.	Industry	June 6	General Motors, London
4.	Information	June 16	Centennial College, Toronto
5.	Associations	June 20	Humber College, Toronto
6.	Social planning agencies	June 22	Social Planning Council, Toronto
7.	Trade unions	June 26	Ontario Federation of Labour, Toronto
8.	Financial	June 26	Ryerson Polytechnic, Toronto
9.	Hospitality	June 28	George Brown College, Toronto
10.	Construction trades employers	June 29	Algonquin College, Ottawa
11.	Francophones	June 29	Algonquin College, Ottawa
12.	North and resources	July 4	Timmins

Study Team 3: Colleges and the Communities

Final Report

Table of Contents

Acknowledgments

This Study Team 3 Final Report represents the combined energies of many people who care about colleges and communities. First, a very special thanks to the Study Team 3 members who contributed thoughtful perspectives from many constituents, and who were involved in research and consultation. Many other people from community organizations and colleges throughout the province also greatly enriched our team's work through their participation in surveys and interviews, their written Vision submissions and their involvement in community focus groups.

Thanks also to the writers of our background papers, Bernice Bell, Elizabeth Thorsen and Susan Wismer. In addition, we appreciate the assistance from numerous conference participants, other Vision 2000 staff and team members, and the very helpful staff at the Ontario Council of Regents. Finally, special thanks to Susan Wismer who facilitated study team workshops, and was central to the research and writing of this final report.

<div align="right">

Ruth Gates,
Chair, Study Team 3

Francie Aspinall,
Executive Officer, Study Team 3

</div>

More Than an Open Door is the title of the final report produced by Study Team 3 for the Vision 2000 process. This idea, that the college system should provide to its prospective students and present students more than access, means that access is not simply the opportunity to get past the front doors. Access means the equitable provision of an opportunity to succeed.

Study Team 3 was composed of 18 volunteers who represented a wide-range of constituencies. Members were associated with groups that have been traditionally underrepresented and not as well-served as 'typical' college students. Working with its members, with focus groups, and with submissions from over 60 concerned groups and individuals who cared enough about the future of Ontario's colleges to send in their visions, the Study Team and its Executive Officer, Francie Aspinall, developed a series of significant research questions. The team then identified four areas of strategic focus for implementation of the principle of equitable access:

- educational equity for diverse groups;
- lifelong learning;
- adequate support;
- a system-wide approach to research for planning and evaluation.

Recommendations for improving the situation for our diverse groups of learners were developed and were approved by the Study Team as a whole. In general, it is interesting to note that although Study Team 3 examined the college system from its particular perspective of equity and access, other study teams are producing some similar recommendations about access while coming from quite different perspectives. It is clear that as we look toward the year 2000, the colleges' role in society and the economy must be to ensure that appropriate resources are put into place to assist part-time learners, students with disabilities, native students, students of diverse multicultural and ethnic backgrounds, etc.

Lifelong learning is a phrase we hear much of these days, but the college system is not really prepared for the advent of the lifelong learner who will select the times at which he or she will enter and re-enter the learning process and will moreover want to find in the system the diversity of services, programs and delivery methods that are appropriate for the year 2000. As part of the Vision 2000 process, we have identified areas of concern and highlighted problems which must be addressed. We

have also provided a draft set of values which, we believe, will assist the college system in developing in a humane and appropriate direction. We have communicated widely with the communities that we serve and our recommendations are reflective of those communities. In all our thinking, we have attempted to be responsible and to recognize the fact that financial resources are limited; we have attempted to point out ways in which overall college objectives can be realized without calling for a massive infusion of capital. Having said that, however, it must be pointed out that a refocussing on the priorities outlined in this report will demand resources and will demand a commitment from all concerned to ensuring that a college education is accessible and is a successful experience for all concerned.

Ruth Gates
Chair, Study Team 3

Study Team 3 is one of five teams which have been assembled to provide guidance to the Steering Committee for Vision 2000.[1] Each team has an identified area of emphasis and has been expected to coordinate research and consultation and to facilitate public input into the Vision 2000 process. Study Team 3 includes 18 volunteer members, who represent a wide range of 'communities' within the college system. The frequently overlapping membership of these communities includes people with diverse racial and ethnic backgrounds, labour union members, women, native people, Franco-Ontarians, 'special needs'[2] groups, seniors and the non-profit sector. Study Team 3 has a particular mandate to examine issues related to access and equity.

This Final Report provides a summary of the perspective which Study Team 3 has developed during the course of its work. A more detailed discussion can be found in the five research papers which Study Team 3 has produced.[3] Study Team 3 members are not calling for radical changes to the original mandate and value base of the college system. However, they do believe that a change in priorities and a more proactive and critical approach to realizing a renewed mandate and clarified set of values in action, are required. As a first step in articulating the changes necessary, Study Team 3 has drafted a values statement for the Ontario Community College system in the year 2000. From that values statement, two key principles for action have been identified: equitable access and educational quality.

---

[1] A sixth table, including Francophone representatives from all five teams, has produced a separate report, including recommendations for college education for Franco-Ontarians. Recommendations from the report relevant to Study Team 3's work have been included in Appendix 1.

[2] For the purposes of this paper, the following definition of special needs will be used: "Special Needs means disabilities (including learning disabilities) that impair an individual's ability to demonstrate academic competence." Elizabeth Thorsen, Team 3's researcher investigating issues related to special needs has cautioned, however, that by the year 2000, Ontario's colleges should follow the lead of the Human Rights Commission in developing a position on special needs which emphasizes 'reasonable accommodation' rather than particular sets of physical, mental or learning characteristics. Elizabeth Thorsen, "Special Needs Students: Toward the Year 2000," in Colleges and the Communities. (Toronto: Ontario Council of Regents), 1990.

[3] See Appendix 6: Abstracts of Background Papers.

This report and its recommendations are based on the recommended values statement and organized around the two principles for change. The section below addresses Study Team 3's concern that commitment to a consistent, system-wide statement of values provides an essential foundation for the kind of community college system which we envision. The following two sections address the two key principles of equitable access and educational quality, providing definitions and recommendations for implementation. A concluding section discusses the implications of the recommendations for the mandate and role of Ontario's community colleges in the coming decades. A number of appendices are attached, including Appendix 1, a series of supporting constituency-specific recommendations, developed by Study Team 3 members; and Appendix 2, a glossary of key terms used in this report.

It is important to recognize that many initiatives which are currently underway in colleges across the province are consistent with the recommendations of Study Team 3. There are many strengths in the current situation. However, there is much work still to be done. Our recommendations are intended to indicate areas where system-wide initiatives are required, or where individual initiatives which are currently considered unusual or innovative need to become common practice.

Although Study Team 3 found much to celebrate during its investigation of access and equity in college-community relationships, it also identified a rising tide of concern that colleges are not addressing rapidly changing social and economic conditions in Ontario with the energy, commitment and leadership which are required. Ontario's colleges were designed originally to provide a bridge into post-secondary education and increased employment and educational opportunities. That mandate — to be a bridge to widened range of opportunity — is at least as important now as it was 25 years ago, when Ontario's colleges began their work. Vision 2000 provides the opportunity to reaffirm that mandate and to strengthen it with a series of innovative and/or redirected supporting policies and practices.

Basic Values:
A Statement for Ontario's Community Colleges

▲ *Recommendation 1: Values Statement to be Incorporated into the Mandate*

The following recommended values statement should be formally incorporated in the Statement of Mandate for Ontario's community college system, as part of its official documentation:

> Education has an essential role to play in the development of a world which is peaceful, environmentally sound, equitable and economically viable. Education is a critical force in any society which effectively balances individual and community needs, fostering personal initiative and cooperation within human relationships based on mutual respect.
>
> In broad terms, education should give people the opportunity to develop the skills and knowledge that they need to actively adapt to and make a constructive contribution to the world in which they live. Community college education should enhance students' occupational choices and opportunities, and promote the development of individual potential. It should also instil in students a commitment to social responsibility and care for the communities in which they live, and respect for the rights to cultural integrity and self-determination of those whose language and traditions may be different from their own.
>
> Ontario's Community Colleges should provide accessible, high quality services and programs which are available on an equitable basis to diverse groups within the communities they serve; and with special emphasis on those groups who are least well served by other public and private sector educational organizations and institutions. In all their policies, programs, structures and services, Ontario's colleges should model for their communities the peaceful, equitable and viable world for which they educate.

Diversity is one of the Ontario community college system's greatest strengths. Each of the province's 22 colleges has adapted to local circumstances in different ways to address local needs and concerns. However, in order for that diversity to be maintained and enhanced in the coming years, it is essential that Ontario's colleges have a strong sense of the common ground which provides a foundation for flexible and innovative adaptation to changing circumstances.

In 1965, when the college system was established, it may have been possible to assume that colleges, along with other public institutions, shared a well-known and

unchanging set of values with the Ontario public they were created to serve. Today, in 1990, it is no longer possible to make such an assumption. In a rapidly changing world, values also change. And in an increasingly heterogeneous society, assumptions about 'traditional' values must take into account many traditions. As a matter of integrity, credibility, social responsibility, and as part of their educational practice, Ontario colleges must be able to articulate clearly for the people they serve the values on which they base their policies and practices. The values statement recommended here provides the basis for a reaffirmed and refocussed statement of mandate, and provides the foundation for the recommendations which follow.

▲ *Recommendation 2: Equitable Access*

A commitment to the principle of equitable access, as defined below, should be included in a formal statement of renewed mandate for the Ontario community college system:

> Within the college system, equitable access means an active effort to provide equality of educational opportunity to all students, through the implementation of non-discriminatory, non-elitist admission policies and the creation of appropriately flexible programs and services which enable traditionally underrepresented groups to participate fully in post-secondary education.

What is Equitable Access?

The principle of equitable access encompasses two basic ideas: equity and access.

Equity has been defined in the Canadian Charter of Rights and Freedoms as follows:

> "Every individual should have an equal opportunity with other individuals to make for himself or herself the life that he or she is able and wishes to have ... without being hindered in or prevented from doing so by discriminatory practices based on race, national or ethnic origin, colour, religion, age, sex or marital status, or conviction for an offence for which a pardon has been granted or by discriminatory employment practices based on physical handicap."[4]

Equity is a matter of public policy and of legislated mandate for public educational institutions, including Ontario's Community Colleges. In addition to the Canadian Charter of Rights and Freedoms, the Ontario Human Rights Code, Ontario's participation in the First Ministers' Conference on the Status of Women, Ontario's commitment in policy to native self-government in 1985, Bill 82 which establishes the right to appropriate education, the French Language Services Act, federal and provincial multiculturalism policies and a number of other pieces of federal and provincial legislation and/or policy have affirmed the right to equality

---

4   Canadian Human Rights Commission, <u>Canadian Human Rights Act: A Summary</u>. (Ottawa: Government of Canada, 1978).

of opportunity and self-determination of every Ontario resident. These laws and policies have also placed increasing responsibility on relevant institutions for ensuring that equality is a matter of practice, as well as policy.

With respect to access, the following quotes provide the basis for defining the term:

> "... accessibility, in it simplest terms, means that post-secondary education must be available to the sons and daughters of people who have not themselves had the opportunity, and to those groups in our society who have not enjoyed equal opportunity to participate ..."[5]

> "Access: The opportunity for students to enrol and succeed in appropriate college programs"[6]

... More than an open door ...

The definition of equitable access which Study Team 3 has developed includes the central ideas expressed in both statements above: that access is an historical process of progressively removing barriers, with emphasis on those who have been least well-served in the past; and that access is not simply the opportunity to get past the front doors. It means the equitable provision of "opportunity to succeed" — finding within those doors the constellations of resources and services necessary for realizing optimum benefits from post-secondary education.

... Not simply a matter of numbers ...

Equitable access is not primarily a matter of numbers. Equitable access policies may or may not result in an increase in the absolute numbers of students admitted to the college system. The issue is not whether colleges recruit more students, but whether the basis for recruitment of whatever numbers resources allow, is fair. Equitable access is a matter of ensuring, through policies, support services, the structure and content of programs and courses, and the structure and allocation of resources, that all members of the communities that colleges serve have **equal opportunity** to benefit from the resources that colleges represent.

---

5   Brian Segal, Chair, Report of the National Forum on Post-Secondary Education. (Toronto: Council of Ministers of Education, Canada), 1988.

6   Terry Dance, " Access and Quality: Preparatory and Remedial Education in the Colleges," in Challenges to the College and the College System. (Toronto: Ontario Council of Regents), 1990.

... Equity and efficiency ...

Some concern has been expressed about whether colleges can 'afford' equitable access. One response to that concern relates to the point made above — that equitable access has at least as much to do with quality as it does with quantity. Of course, equitable access costs money, but it does not necessarily cost **more** money.[7] A wide variety of submissions to Vision 2000's Study Team 3 have emphasized the belief that equitable access is a matter of eliminating 'waste' — for example, by increasing retention rates; and by reallocating resources based on the development of new policies such as those designed to ensure that college employees and students are representative of the diversity of the communities colleges serve.[8] Everyone accepts that resources will continue to be constrained. Many people believe as well that a more equitable allocation of resources can also be a more efficient use of available resources.[9]

Why Equitable Access?

The argument for equitable access is a simple but compelling one. Developed economies are increasingly knowledge-based. In order to maintain its historical status as a developed nation, Canada will need to invest heavily in human resource development.[10]

Increasingly, the mark of a developed nation lies not only in its capacity to **compete** effectively in global economies, but also by its ability to **cooperate** in the interests of sustainable development.[11]

---

[7] It is important to note here, however, that equitable access does not provide an argument for less money. A recurrent concern among clients of the colleges and among members of the college community throughout the Vision 2000 process has been that the outcomes of Vision 2000 should not be used to justify further cutbacks in funding to community colleges.

[8] This was, for example, an important and recurring theme in the responses to Study Team 3's survey, carried out in the summer of 1989.

[9] See, for example, Rianne Mahon "Toward a Highly Qualified Workforce: Improving the terms of the Equity-Efficiency Trade-Off" in Colleges and the Changing Economy. (Toronto: Ontario Council of Regents), 1989.

[10] Premiers' Council, Competing in the Global Economy. (Toronto: Queen's Printer), 1988.

[11] Sustainable development is defined as: a community-based process of planning and development directed toward achieving optimum states of human and environmental well-being

Competition for a place in global markets and cooperation in the interests of future generations will require a diverse and adaptable workforce. The more culturally and ethnically diverse that workforce is, and the better equipped its members are with a high level of skills and knowledge, the more effectively and efficiently it will be able to anticipate and meet the needs of customers from all over the world; and to make the adjustments in lifestyle and thinking which will be necessary in order to ensure that the human and natural communities we leave to our future generations will be able to support them in a state of general well-being.

In practice, investment in human resource development will require that as many people as possible be encouraged to maximize their capacities to acquire or improve skills and knowledge, no matter what their educational or cultural background. The best approach to creating a skilled, adaptable and diverse workforce is to make educational resources available to the broadest range possible of people, in forms relevant to their particular needs.

Given their dependence on public funding, continued financial support for colleges will rest on their evident contribution to the socio-economic well-being of the communities and regions they serve. The socio-economic milieu in which colleges exist, during these last years of the twentieth century is one in which, increasingly, people are acknowledging that long-term survival and well-being is directly linked to issues of equity.[12] Through a mandated commitment to equitable access, Ontario's colleges will be well-placed to play a critical role in ensuring the equitable distribution of educational resources within and across communities, as a fundamental part of their contribution to meeting the emerging human resource needs of the province as a whole.

---

without compromising the possibilities for other people, at other times and places, to do the same. Source: Susan Wismer, "Planning for Sustainable Development in Canada." (forthcoming.)

[12] See, for example, Hon. John Sweeney, Min., Looking Ahead: Trends and Implications in the Social Environmen. (Toronto: Ontario Ministry of Community and Social Services/Queens Printer), 1989; Hon. Bette Stephenson, Minister, "Toward the Year 2000: Future Conditions and Strategic Options for the Support of Learning in Ontario," Review and Evaluation Bulletin 5:1, (Ontario Ministry of Education/Ontario Ministry of Colleges and Universities/Queen's Printer), 1984; and Provincial Access Committee, Access to Advanced Education and Job Training in British Columbia. (Victoria: Ministry of Advanced Education and Job Training), 1988. For a global perspective on the same argument, see Gro Brundtland, Chair, Our Common Future. (Oxford: Oxford University Press), 1987.

One of the greatest challenges facing Ontario's colleges in the twenty-first century will be how to share limited educational resources equitably among all those who are in need of some form of post-secondary education, in each of the communities the colleges serve. It is Study Team 3's belief that the basis for addressing that challenge must be a commitment to the principles of equitable access; and of quality of educational service.[13]

Implementing Equitable Access: The Principle in Practice

The current situation is not equitable. Young, highly motivated high school graduates with a clear need for an intensive preparation for work in fields related to health, business, human services and technologies were a highly visible group in the first days of Ontario's colleges. It is perhaps not surprising that, in the rush to serve them, other groups and individuals were assumed to have less priority. However, the result has been a legacy of systemic barriers for learners who do not 'fit.'

One study found, for example, that part-time students are considered to be 'less important' than full-time students; and that this opinion expresses itself not only in the attitudes of faculty, administrators and support staff, but also in the structure of resources, programs, services and information provided. In 1987-88, for example, part-time funded tuition represented 27 per cent of all tuition revenue in Ontario's colleges, yet only 8 per cent of expenditures were directed to part-time funded activity.[14]

Another study found that in 1987, there were approximately five registered part-time college students for every one full-time student; and that, historically, growth in part-time student enrolments has increased steadily, while full-time enrolments appear to be stabilizing for the province as a whole.[15] Clearly, and despite a funding

---

13 Many conclusions are similar from Vision 2000's Study Team 1, 2, 4 and 5.

14 Teresa Karolewski, "Continuing Education in Ontario's Community Colleges: Student Profiles, Barriers and Exceptional Practices." (Paper prepared for Vision 2000), June 1989.

15 Jo Oppenheimer, "The Relationship Between Schools and Colleges," in Colleges and the Educational Spectrum. (Toronto: Ontario Council of Regents), 1989.

structure which assumes otherwise, part-time students **are** at least as important as full-time.

Over the years since the colleges were established, consistent concerns have been expressed about the barriers to access experienced by other identified (and frequently overlapping) 'communities' of potential college students. Special needs groups, including people with specific disabilities, native people, francophone people, 'dropouts,' seniors, older workers in need of retraining, women, people with diverse ethnic and racial backgrounds, and in particular, people living in poverty, have all been identified as facing significant barriers within the colleges. While it is certain that some individuals within these groups have experienced overt discrimination, by far the greatest problem is with systemic discrimination — institutional arrangements, such as those affecting part-time learners, which mean that, despite the good intentions of everyone involved, some people are ultimately 'less equal' than others.[16]

Systemic barriers tend to be visible only to those who experience them. The more effective the barriers are, the less likely it is that colleges will hear about them from those who are affected. Systemic barriers frequently have at least as much to do with what is not in place, as they do with what is. For example, absence of child-care facilities, lack of or infrequent public transportation links to colleges during evening hours, inadequate financial assistance, absence of interpreters for deaf or readers for blind people, have all been identified as barriers by people who have not been able to access the college system, despite their desire to do so. Responsive and continuing community consultation is necessary in order to identify and remove barriers which often cannot be easily perceived by people who already have found a place for themselves inside the colleges.[17]

Study Team 3 has identified four areas of strategic focus for implementation of the principle of equitable access and elimination of problems in the current

---

[16] See Vision 2000, With the Future in Mind: An Environmental Scan, (Toronto: Ontario Council of Regents, March, 1989) for a review of communities which have been identified as being under-serviced, or possibly under-serviced, by the colleges.

[17] The Vision 2000 process has collected much information which identifies currently existing barriers. The challenge now is to act upon that information, and to ensure that consultation is ongoing, since systemic barriers change with changing social and economic conditions.

situation: educational equity for diverse groups; lifelong learning; adequate support; and a system-wide approach to research for planning and evaluation.

▲ *Recommendation 3: Educational Equity*

The Ontario community college system should be formally committed, in policy and practice, to educational equity as defined below:

> Educational equity involves the identification and removal of systemic barriers to educational opportunities that discriminate against women, visible minorities, aboriginal peoples, persons with disabilities, people living in poverty or members of other groups which have been identified as being underserved with respect to their needs for post-secondary education. Educational equity also involves the implementation of special measures and the application of the concept of reasonable accommodation when these are necessary to achieve and maintain a student group which is representative of the communities served.[18]

The following measures are required in order to ensure that a systemic commitment to educational equity is fully implemented:

▲*3a. Establish and monitor policies at the individual college level.*

All colleges must have in place educational equity policies, race and ethnic relations policies, and employment/appointment equity policies for all designated groups;[19] and must also formally define specific measures for implementing and monitoring these policies.

▲*3b. Establish system-wide standards for reasonable accommodation.*

Colleges must ensure that the specific ethno-cultural and/or physical characteristics of learners are respected by providing on-going support for the educational aspirations of a wide variety of individual learners. In practice, this means an active system-wide commitment to accommodation of those with specific physical or learning disabilities through maintenance and expansion of existing Special Needs programming; and a parallel commitment to provision of culturally-appropriate programming in situations where it is needed.

---

[18] This definition is based on the definition of employment equity currently in use by Employment and Immigration Canada. See Employment and Immigration Canada, Employment Equity: A Guide for Employers. (Ottawa: Supply and Services Canada, no date, WH-3-596).

[19] These include, in addition to women, cultural and linguistic minorities, visible minorities, and people with specific disabilities.

▲3c. Establish and monitor system-wide employment equity policies.

The Province of Ontario has defined employment equity as:

> "equal employment opportunity regardless of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, age, record of offences, marital status, family status, or handicap … (E)mployment decisions should be based on merit, and not on criteria that are unrelated to job performance."[20]

Educational equity requires employment equity. While the colleges have made some important steps forward in the employment equity area, there is still much work to be done in order to ensure that colleges are representative of the diverse communities they serve with respect to administration, faculty, and staff at all levels.[21]

▲3d. Ensure that funding, policies, services and program structures are adjusted to allow for flexible completion dates and varying educational methodologies.

College courses and programs must be organized so that established goals and standards can be met through a wide range of program plans and methods and within varying time periods. Services and programs must be reorganized to provide equal educational opportunities in part-time and full-time studies.

▲3e. Establish, as a matter of mandate and priority a commitment to ensuring that no one should be barred from college education because of low-income levels or the problems associated with low-income levels.

The college system as a whole, and individual colleges must specifically identify and develop strategies for the removal of systemic barriers to equitable access by low-income people. Study Team 3 research has found that groups identified as being 'underserved' within the college system tend to have in common historically low levels of income.

▲3f. Be prepared to engage in advocacy work when required.

The college system as a whole, and individual colleges should be prepared to advocate for designated groups both in working with provincial government ministries on issues related to educational equity; and in making public statements supporting initiatives which will increase the potential for

---

[20] The Ontario Human Rights Code: An Overview. (Toronto: Ontario Human Rights Commission), unpaginated.

[21] Wendy Vermeersch, Presentation of the Chair of the College Committee on Equity in Education and Employment to Vision 2000. (unpublished, February), 1989.

educational access for low-income people and members of other designated groups.[22]

The historical strengths of the college system in the area of diversity need to be extended into new areas in the interests of equitable access. It is no longer possible, if it ever was, to assume that the community of learners which colleges serve, possesses any particular group of characteristics other than a desire to engage in post-secondary education and a need to realize its benefits. Study Team 3 has received its most eloquent and strongly expressed submissions from groups supporting the increased provision of services to diverse groups of learners. Equitable access will require colleges to develop a new capacity to serve different **types** of learners.

Part-time students, francophone, native, deaf, and groups representing people of diverse cultural and ethnic backgrounds have made strong arguments in favour of providing post-secondary education within the college setting which respects their varying backgrounds, respects their need and desire for self-determination, and is oriented to their particular sets of educational requirements. People with specific disabilities have argued that colleges must extend to them their right to an education. People with low levels of educational attainment, who are in need of literacy and numeracy skills, argue that their lack of Grade 12 qualifications is not a sufficient reason to deny them the education which is so clearly in their own interests and in the interests of the communities in which they live.

Groups identified during the Vision 2000 process as being 'underserved' within the colleges, and by implication elsewhere in the post-secondary system as well, tend to have in common at least one thing: low income. Any discussion of equitable access to college education and of structural relevancy must take into account the correspondence between low income and lack of access to college.

Colleges cannot be expected to singlehandedly overcome all barriers to education on behalf of low-income people. However, they should be able to work actively with low-income people, **as a matter of mandate and priority,** in order to assist them

---

22 Relevant initiatives in the former category include removing biases against part-time students within OSAP (the Ontario Student Assistance Program) and improving levels of support available within various programs offering training allowances and subsidies for educational purposes. In the latter category, issues such as the development of national policies on child care and literacy, or municipal policies on ethnic and race relations, are examples.

to deal as effectively as possible with the barriers they face, with respect not only to financial assistance, but also in the areas of child care, study space, health care, and in meeting the frequently conflicting requirements of a wide variety of regulatory agencies.

▲ *Recommendation 4: Lifelong Learning:*

Ontario's colleges should commit themselves, in policy and practice, to supporting lifelong learning according to the following definition:

> 'Lifelong learning' includes those purposeful activities that people undertake with the intention of increasing their knowledge, developing and updating their skills, and modifying or affirming their attitudes throughout their lifetimes.[23]

In order to support lifelong learning, the following measures are required:

▲ *4a.* *Eliminate distinctions between part-time and full-time learners and programs.*

> Existing distinctions between part-time and full-time learners and programs must be removed, in funding for programs and learners, in program structure, and in support services.

▲ *4b.* *Organize services and programs so that the family and work responsibilities of learners are recognized and supported.*

> Colleges must reorganize support services and programs in order to be able to effectively address the educational needs of the increasing numbers of learners who must balance a commitment to post-secondary education with equally important commitments to children, spouses, aging or dependent relatives and places of work. In particular, colleges must recognize that available times for education are frequently fragmented by other responsibilities and often occur outside the regular '9 to 5' working day; and that provision for comprehensive child-care services must be made a high priority.[24]

---

[23] Adapted from: Organization for Economic Cooperation and Development, Secretariat, Learning Opportunities for Adults: Framework for a Comprehensive Policy for Adult Education, (Paris: OECD), 1975.

[24] Comprehensive child care includes part-time, after 4:00 p.m. and evening care as well as the 'regular' full-time services.

▲4c. Establish early and on-going learner-college relationships.

In order to effectively assist learners to engage in lifelong learning, colleges must be prepared to begin to work with prospective learners before registration and to maintain contact with them after completion of college programs. In practice, this will mean more emphasis on working with high schools, referring community agencies and places of employment to identify and counsel prospective learners; new approaches to assessing the on-going learning needs of those who have officially completed college programs; and developing support services, such as child care and vocational counselling, which are accessible not only to present, but also to former and potential students.

Lifelong learning means that colleges must adapt themselves to a reality in which post-secondary education for most people begins at the age of 17 or 18 and continues, on an intermittent basis, for the rest of the mature life of the learner. Education in the context of lifelong learning is a cyclical and iterative process. Although initial post-secondary educational experiences will continue to be important, subsequent experiences are equally important. Across the college system and within individual colleges, the structure of support services, programs and funding needs to be altered in recognition of the importance of episodes of post-secondary education throughout the adult years. Submissions to Vision 2000 have identified a number of important initiatives in this area, including:

- fair assessment for prior learning, including credit for life experience and procedures for acceptance of foreign credentials;
- credit banking, so that college credits can be transferred from one college to another, and from one educational episode to another;
- human resource development for college faculty and staff so that they are fully aware of adult learning needs, and so that they have the skills and knowledge necessary to develop appropriate learning/teaching strategies with and for adult learners.

▲ Recommendation 5: Adequate Support

Ontario's colleges must make a system-wide commitment to the provision of adequate support, as defined below:

Colleges provide adequate support by ensuring that all measures necessary for successful transition into and out of the college system, including financial resources, services and preparatory programs are in place and are equitable and available to all students.

In practice, a commitment to adequate support will require the following measures:

▲ **5a.** ***Provide initial and on-going individual needs assessment, as a supportive element in a lifelong educational process.***

Increased allocation of resources for individual needs assessment of current students and prospective students will be required in order to ensure that educational resources are delivered as efficiently and effectively as possible to an increasingly diverse client population. Needs assessment should be available to all students. It should be organized as part of the learning experience of college education — as a process of providing students with the skills and knowledge necessary to identify needs and goals and to match them with relevant courses and programs. Needs assessment takes place not only as students enter college, but also as they prepare to make the transition from college to community; and at a number of future points, as they prepare to re-enter college as part of their engagement in lifelong learning. This requires not only on-going contact with students, but also well-defined and fully-informed relationships with their current and/or prospective employers.

▲ **5b.** ***Ensure a commitment to preparatory programming.***

Students or prospective students who do not have the skills and knowledge necessary to succeed in a particular college program should be provided with a clearly defined pathway into that program, via college-sponsored or college-approved preparatory and remedial education.

▲ **5c.** ***Stabilize funding for access programs.***

Currently access programs (outreach, counselling, bridging, assessment, preparatory programs, remediation etc.) are funded through a variety of mechanisms and programs which tend to be vulnerable and/or unstable. Access programs must be recognized, in funding, as well as in policy, as an integral part of college education and an essential component of a strategy designed to ensure that college graduates emerge with the highest possible levels of skills and knowledge.

There is a lot more to college education than what goes on in the classroom. Adequate support cannot be viewed as 'secondary' programming. The educational experience provided through access and support programs is a critical component of the learning experience which colleges provide, and will be an increasingly important complement to classroom-based learning in a world which demands that educated people demonstrate their credentials by being adaptable, analytical and capable of synthesis and problem-solving. The learning experiences which access programs provide, and the links which they develop with groups and programs outside college walls make access programs essential to integrating the resources of

colleges with the changing needs and interests of the people in the communities colleges serve.

▲ Recommendation 6: Research

Research is required, on a system-wide basis, in order to assist individual colleges and the system as a whole with evaluation, strategic and long-range planning and program/service development. Information is needed on a province-wide basis, concerning why students enrol at colleges, what happens to prevent would-be students from enroling, why students leave before completing programs, and what happens to students over a period of years after completion of college programs. As part of the responsibility which comes with receiving public resources, the community college system must be prepared to systematically evaluate its activities in terms of outcomes.

In order for research capacity to be developed, the following measures will be necessary:

▲6a. Create a central mechanism for planning, coordinating, carrying out and distributing the results of province-wide research.

A representative organization should take on an enhanced research role or a separate research institute should be established.

▲6b. Allocate funds to research at provincial, regional and local levels.

Research monies should be identified and allocated to provide for research projects initiated by individual colleges, college regions and the system as a whole.

▲6c. Ensure bilingual capacity.

Research must be accessible to people who speak either of Canada's official languages.

Colleges are accountable in different ways to their students, to the communities in which they are located, and to their funders. Yet, during the course of research for Vision 2000, it became apparent that the strong information base and effective communication and decision-making mechanisms which are essential in order to demonstrate accountability are in some cases totally lacking across the college system, and in others, are inadequate or inconsistent. In order to define a role for itself in a changing socio-economic educational context, and to demonstrate its capacity to effectively carry out that role, colleges must be engaged in an on-going

process of research for planning and evaluation purposes. Further, this research activity should be structured in a way which maximizes consultation with and participation by the communities which colleges serve.

▲ *Recommendation 7: Quality of Service*

Ontario's colleges, like all educational institutions, are service-providers and must be guided by and evaluated upon a commitment to quality of service as defined below:

> Quality of educational service is both process and outcome. With respect to process, quality of service is based on equitable access and its attendant concepts of educational equity, lifelong learning, adequate support and on-going research for planning and evaluation. With respect to outcome, quality of service is based on **relevance** to learner needs, **relationships** with groups served and effective and efficient distribution of **resources** in order to achieve optimum levels of educational and occupational opportunity for a diverse group of present and potential students.[25]

What is Quality of Educational Service?

As economies throughout the industrial world become increasingly knowledge-based and service-oriented, the word 'productivity' is changing its meaning. Increasingly, the 'leading edge' is based on quality of service.[26] Quantity alone means less and less. In this climate, public sector educational organizations like colleges must be able to point not only to the numbers of students they serve, but also to the high quality of services they provide. Any lingering image of colleges as 'second class' or 'immature' educational institutions must be put firmly to rest if colleges wish to maintain their share of public resources. A focussed and public commitment to the principle of quality of service will be essential to the well-being of colleges in the twenty-first century.

Colleges are already committed to quality of service. What is needed is a stronger focus on that commitment, both internally with respect to policies and practices, and externally with respect to public relations. In general, quality of service is associated with an emphasis on excellent communication, good information-gathering (as in

---

[25] It is important to note here that we are referring to the distribution of quality as well as quantity of both human and financial resources.

[26] Johnathon Gershuny and Ian Miles, The New Service Economy. (London: Frances Pinter), 1983.

accountability), a high level of technical skill with respect to design and delivery, and flexibility, in order to anticipate and adapt to on-going changes in client needs. In the college context, as our definition indicates, quality of educational service is related to:

- **processes** defined in relationship to the principle of equitable access; and to:
- **outcomes** which are tied to the key ideas of:
  - **relevance** to changing student needs,
  - **relationships** with communities and groups within communities served, and
  - **resources** distributed effectively and efficiently in the interests of maximizing opportunity for a diverse student group.

Implementing Quality of Service: The Principle in Practice

Study Team 3 has identified three areas of strategic focus with respect to the key ideas of relevance, relationships, and resources in quality of educational services:

- education for change and development;
- links; and
- human resource development.

▲ Recommendation 8: Education for Change and Development

It would be a serious mistake to pretend that the major socio-economic and environmental challenges which Ontario, Canada and the world are facing could be solved simply through an emphasis on economic efficiency. Colleges have a social responsibility to model for and educate about activities which acknowledge and act on the challenges facing all of us. In particular, college learning must not only be about how to make 'a good living' in the employment and income-related sense in which the phrase is usually understood. It must be about 'good living' in its broader sense — about making a life which is ethically, culturally, environmentally and socio-economically sound.

No matter what their area of program emphasis, all college students should be provided with education in skill and knowledge areas designed to maximize their ability to access a range of high quality educational and employment

opportunities.[27] Graduates of college programs should be recognized for their common set of skills and knowledge in the areas of:

- literacy;
- numeracy;
- interpersonal and communication skills;
- analytical and problem-solving skills;
- technological literacy; and
- global issues and good citizenship.

Allocation of resources to these areas should be a first priority across all programs. System-wide common parameters for 'exit standards' should be developed. The best preparation for a 'high tech' world lies in the acquisition of a set of well-developed portable and transferrable skills. These skills are essential so that students can achieve personal security for themselves and their families, and so that they can be committed and productive community members.

High quality educational services can only be developed and delivered if they are based on a thorough knowledge of the full range of educational needs colleges seek to address. Educational needs are not segmented. Economic needs are embedded in a social, cultural and personal context from which they cannot be effectively separated. The planning, implementation and evaluation of college education must be informed by an integrated view of education and life, if it is to be effectively oriented to the provision of quality educational services.

Colleges, as publicly funded organizations and as educational institutions, have a responsibility to be leaders, rather than followers, in addressing the most pressing social, environmental and economic problems facing the world and each community within it today. Providing students with the highest possible levels of competency through a common set of portable, flexible, transferrable skills will create a situation in which colleges can make a clear contribution to enhancing the capacity of Ontario's citizens to respond with confidence and compassion to present and future socio-economic and environmental challenges.

---

[27] High-quality employment opportunities are those which offer secure sources of meaningful and interesting work at adequate wages with good benefits and safe and healthy working conditions.

Submissions from community organizations made it clear that there is a need to develop a stronger and more coherent public image for Ontario's colleges. Employers want to "know what they're getting" when they hire college graduates. Community organizations want to develop stronger partnerships with colleges, but need a clearer sense of what role colleges are mandated to play in the community before they can know where to begin in developing those partnerships. One answer seems to lie in agreement upon a common set of portable, flexible skills and knowledge which would be the common element in community college education and programs. This common set, according to an impressive variety of people with otherwise conflicting viewpoints, is necessary if college graduates are to cope successfully with emerging socio-economic, technological and environmental realities.[28]

As service organizations, Ontario's colleges must invest their resources in their students. As already stated, preparation for a 'high tech' world hinges on the development of transferrable generic skills. Colleges should concentrate their resources on developing those skills, in a variety of occupational contexts. In a rapidly changing world, investment in people will always yield higher returns than investment in soon-to-be-outmoded products and machinery. Of course, students need exposure to the products and tools of a 'high tech' world as part of their college education, as the quote below indicates. However, in general, this exposure should be achieved through innovation in educational processes such as co-op programs, job placements, and program-related employment opportunities.

> "The lack of a good command of English ... holds back many of the people we do hire ... often people who are technically competent cannot collect their thoughts and brief another employee in a coherent manner on a particular subject ...
>
> ... Employees also have to have strong basic math skills, a must in a highly scientific business like ours. Actually, I'd like to see most of our employees have the better part of a liberal arts degree along with their

---

28 See, for example, Michael Park, Ontario Public Service Employees Union, "Vision 2000: An OPSEU Perspective," (unpublished Vision 2000 submission, May 1989); "Renewing the Commitment: How to Save General Education in Ontario Community Colleges," (unpublished Vision 2000 submission), May, 1989; George Psacharopoulos, Future Trends and Issues in Education. (Economic Council of Canada: Ottawa), November, 1988; David Wolfe, "New Technology and Education: A Challenge for the Colleges" in Colleges and the Changing Economy. (Toronto: Ontario Council of Regents), 1989.

technical training. Even the study of foreign languages is useful, because it helps you to understand your own language better. We expect to train employees on our machinery, but they have to be adept at general thinking, and have foresight ...

... Finally, studies in things like sociology help open up people's attitudes ... Over 30 per cent of our high-class engineers are from non-anglo backgrounds, not because we hire overseas, but because Ontario is a multicultural society. It's essential to have some understanding of other cultures in the workplace."[29]

▲ *Recommendation 9: Links*

Development and maintenance of effective partnerships between colleges and other community organizations and institutions from public, private and non-profit sectors, are essential in ensuring relevance and the most equitable and effective distribution of educational resources.

The development and maintenance of links will require the following measures:

▲ *9a. Develop outreach and community-based research.*

All colleges should allocate resources to regular community-based needs assessment, in which outreach to all sectors of the community served is a component, as part of an on-going commitment to quality of service.

▲ *9b. Promote community-based planning and decision-making.*

New approaches are required in order to involve community members more directly in relevant planning and decision-making at the college level. In addition to using regular community-based needs assessments as a mechanism for participatory planning, colleges should consider developing a restructured and more fully integrated approach to creating and working with advisory committees. For example, this would include standard procedures for advertising vacancies on committees and common approaches to developing terms of reference for committees. Colleges should also establish mechanisms to ensure that on-going cycles of strategic planning are informed and influenced by an analysis of local issues and opportunities. In particular, as part of a regular scanning process, colleges should assess the degree to which their students, employees and programs represent the needs, interests, and socio-cultural characteristics of the wider communities in which colleges are located.

---

29   Tom Mathers, Vice-president, Human Resources, Spar Aerospace Ltd., in Ontario Federation of Students, "College Programs: Decline of the Empire" (unpublished Vision 2000 submission, January 1989), p.9.

▲9c. Define a locally-identified role for colleges.

Individual colleges must shape their general role to specifically local opportunities and issues, in order to be relevant to the needs of the communities they serve. As indicated above, the general role of colleges should be to provide students with a set of portable, transferrable skills designed to enhance educational and employment opportunity and to provide students with the capacity to meet the social, economic and environmental challenges in Ontario's communities and in the broader world. How this role is expressed, however, will vary considerably, depending on the varying social, cultural and economic circumstances of the diverse communities which colleges serve.

▲9d. Develop special relationships with identified groups.

Just as special measures are necessary in order to ensure that all people have equal educational opportunities within colleges, so special relationships are sometimes necessary in order to achieve consistently strong and positive relationships with a variety of communities and of groups within communities. In particular, in situations where cultural self-determination and development is a critical educational goal (as with native peoples and with Franco-Ontarians), specially-defined relationships will be necessary in order to achieve consistent quality of service.[30]

▲9e. Promote laddering relationships with community-based groups:

Many community-based groups and school boards are doing excellent educational work in areas (such as literacy) which have the potential to complement and extend the scope of college programming. Laddering relationships, which provide formally-defined, college-mandated pathways to and from community-based educational programs are necessary in order to realize this potential.[31]

In the course of Study Team 3's research, we have received literally hundreds of suggestions regarding the development of relationships with groups and organizations in the communities colleges serve. The strength of the response indicates that community groups believe relationships with colleges are important. The number of suggestions indicates that there is a strong desire to develop and extend relationships. It also indicates, however, that there is much work to be done.

---

[30] See Appendix 1: Constituency-Specific Recommendations.

[31] Community-based literacy programs, for example, are often able to work with learners who cannot access college-based literacy programs, or who would prefer not to attend college. Graduates of community-based programs, however, may well be prepared for college-based learning.

Community groups want colleges to be as actively involved in the life of their communities as possible. As the following quote indicates, what is in the interests of community groups may also be in the interest of colleges:

> "In the future, an increased involvement of independent agencies as partners with boards of education, colleges and universities must occur, for several reasons. It will increase the ability of the educational system to meet the increasingly diverse learning needs of the population, thereby increasing public satisfaction. It will allow for the possibility of distributing the costs of learning more broadly--especially the costs of meeting special needs. As the various communities of interest seek feasible ways to achieve their learning needs, new vehicles for collaboration in program development and delivery, financing and administration will evolve ... In effect the scope of the publicly sanctioned system for education could be expanded while, in relative terms, the scope of the public delivery system could be reduced."[32]

▲ *Recommendation 10: Human Resource Development*

> On a system-wide basis, human resource development for college employees must be a high priority, in order to ensure that colleges have the human capacity to design and deliver relevant programs to a changing clientele.

▲*10a. Ensure that college employees are given the opportunity to engage in on-going skill development in the following areas: adult learning needs, styles and strategies; relevant technical and applied fields; and ethno-cultural/racial and disability awareness and accommodation.*

Two critical factors in the provision of quality services are a high level of technical capacity with respect to design and delivery, and flexibility in anticipating and responding to change. In this context, careful attention to the human resource development of administrators, faculty and support staff is critical. Human Resource Development is critical not only with respect to quality of service, however. It is also essential in implementing educational and employment equity provisions inherent in the other key principle of equitable access.

---

32 Ministry of Education/Ministry of Colleges and Universities, "Towards the year 2000: Future Conditions and Strategic Options for the Support of Learning in Ontario" in Review and Evaluation Bulletin 5:1. (Toronto: Queen's Printer), 1984.

A research project done for Vision 2000 suggests that about 50 per cent of college faculty currently employed will still be working in the year 2000. The largest number will be in the 50-64 age range. As a group, these people will be some years removed from experience in non-college work settings. Submissions to Vision 2000 emphasized the importance of human resource development for college employees in three areas in particular: adult learning needs, styles and appropriate strategies (including distance education, independent and modular learning, accommodation for the disabled, etc); technical and applied fields relevant to college programs; and awareness and accommodation training with respect to people who have specific disabilities and people of varying racial and cultural backgrounds.

During the course of Study Team 3's research, numerous suggestions were received for human resource development, including:
- a system-wide mechanism for coordinating resources and research for use in human resource development programs at individual colleges;
- developing a skills bank, so that 'experts' within the system can be identified and contacted for human resource development purposes;
- collaborative labour-management structures for the planning of human resource development initiatives;
- exchange arrangements with college faculty and local employers and community groups.

The large number of suggestions received indicated that many people believe that human resource development is a critically important area for action in implementing their 'vision' of colleges in the year 2000.

▲ *Recommendation 11: Equitable Access and Quality Service — Implementing the Vision*

Ontario has a choice to make. It can follow the lead of the United States and watch as its social and economic middle continues to erode, taking with it the security and well-being of a large part of our population, or it can decide that there must be an alternative. Colleges have a critical role to play in advocating for an alternative future and in ensuring that there **are** pathways which lead from part-time and temporary jobs offering low wages, few or no benefits, and poor safety and health conditions to high quality sources of employment. As institutions established to provide a bridge into non-university post-secondary education, and as a system which is committed to the twin principles of equitable access and quality of service, colleges can play a leading role in the movement toward an equitable, respectful and sustainable society.

▲*11a. Establish a formal mechanism for implementing recommendations coming out of the Vision 2000 process.*

> This mechanism will require: an adequate resource base; a representative structure which provides for on-going participation in decision-making at the individual college level; and an advisory committee with strong representation from community organizations and employers, which will have responsibility for monitoring and reporting on the implementation phase of Vision 2000.

Study Team 3 members and the large numbers of college staff members and community representatives who sent in submissions have put many hours of volunteer work into the Vision 2000 process. Their willingness to make that effort is, on the one hand, a tribute to the accomplishments of the Ontario college system during the years since 1966, and on the other, an indication of their interest in seeing things change.

The real work of Vision 2000 has only just begun. There a need, as our recommendation suggests, to develop formal mechanisms for implementing recommendations coming out of work done to date by Vision 2000. There is also an equally critical need for continuing research and consultation. Study Team 3's members, for example, have a particular concern about the present and future status of **international education** within the colleges. This concern has not, to our knowledge, been adequately addressed by any of the study teams. Our contact with

people in geographically isolated communities has been less than we would have liked, with the result that issues that have particular importance to rural and isolated communities — such as the **appropriate uses of distance education** — have not had much prominence in our work so far. **Community education** — the role of colleges in providing learning opportunities to groups, as opposed to individuals, has received very little attention. The belief that colleges have a role to play in community development was expressed by francophone and native groups, but has not been explored specifically by any of the five study teams.

These unheard voices only emphasize a point raised in many of our submissions — that the kind of consultation which Vision 2000 has inspired should not be an isolated event. People care about Ontario's colleges. They want them to be vital and important parts of their communities. And they are willing to work with the colleges to ensure that they will be.

As Study Team 3's values statement suggests, we believe that colleges have an important educational role to play in Ontario's communities. The Economic Council of Canada has recently published research which shows a well-established trend toward the erosion of the middle section of Canadian society.[33] If this trend continues, Canada, like the United States, could increasingly find itself with an 'hourglass' shape to its society, with those at the top being separated from those at the bottom, not only by income and job security, but also in terms of social and political status and influence.

But it is not necessary for Ontario's college system to accept this situation. Recent research indicates that there are alternatives to the development of the hourglass society and to the negative social, economic and political consequences it implies.[34] Education of the broadest possible range of people in skills and knowledge which are portable, transferrable and adaptable is a key element of an alternative; as is a commitment in policy and program to providing the highest possible quality of employment opportunity to people throughout society. Education is necessary, but not sufficient. It must be accompanied by measures in the areas of employment

---

[33] Economic Council of Canada, Legacies: 26th Annual Review. (Ottawa: Supply and Services Canada), 1989.

[34] See Heather Menzies, Fast Forward and Out of Control, (Toronto: Macmillan Co., 1989) for a fuller discussion.

equity, equal pay for work of equal value, regional development and economic development.

As institutions which are grounded in the realities of Ontario's local communities and which are committed to the twin principles of equitable access and quality of education service, colleges can play a leadership role in communities and in the province as a whole in advocating for a rejection of the hourglass trend and in demonstrating how we can move away from it. In educating for a skilled, adaptable, tolerant and committed population, Ontario's colleges can model for all of us the peaceful, equitable and viable world which is the alternative we seek. This, more than anything else, is the message about the mandate which Vision 2000's Study Team 3 wishes to give to Ontario's community college system.

Members of Study Team 3 were recruited on the basis of their knowledge and experience with groups of learners who have been identified as being under-served by the college system. Members worked individually and in small groups in developing the following recommendations relevant to the post-secondary educational needs of particular constituencies of learners.

Diverse Racial and Cultural Groups[35]

Profile of current situation/needs identified:

In outreach to specific racial and cultural communities as a result of the initial needs assessment ("Access to Potential"),[36] and as part of the on-going activity of the Multicultural Task Force, the following concerns come up repeatedly:

i) for immigrants — the need for access to general ESL (English as a Second Language) courses and general remedial/preparatory education and bridging programs. However, there is a more dramatic need for English for Special Purposes (ESP) courses — English for Clerical Workers/Auto Mechanics/Computer work/Nurses etc. This need is one which the colleges are well-situated to supply, and which m⋯ ᵗ guarantee a 'market niche' as Boards of Education take on more⋯ ivity in the ESL and Literacy areas.

ii) again, for immigrants — a concern about immigration and refugee status, and how this status impacts on eligibility for college attendance and financial support. These concerns are frequently reported in high school visits (as there are many immigrants and refugees in Metro high schools) as well as outreach to specific ethno-cultural communities.

iii) again, for immigrants and people of colour — the question of Ontario equivalencies for their education and training in their previous countries. This not only impacts on acceptance into colleges, but also on acceptance into a trade or professional associations.

---

35 Prepared by Maureen Hynes in consultation with the members of the Multicultural Advisory Committee, George Brown College and staff at the Polish Immigrant Aid Centre, the Chinese Information and Community Centre, Woodgreen Community Centre Anti-Racism Committee, and Downtown Employment Centre.

36 See Maureen Hynes, "Access to Potential: A Two-Way Street. An Educational and Training Needs Assessment of Metro Toronto's Diverse Racial and Cultural Communities," Interim Report, July, 1987.

iv) for people of colour — the question of racism and what the colleges are doing to combat this in the attitudes of college personnel and college practices.

v) for both immigrants and people of colour — the colleges are also seen as employers. Questions are raised about the lack of movement toward the establishment of employment equity programs for all target groups (women, visible minorities, native people, the disabled, and Francophones).

vi) a lack of access to counsellors who would be able to provide information and guidance about potential college programs and the routes into them.

vii) a concern with the validity of placement and testing instruments and procedures to determine English language proficiency: Has research been done to culturally validate the tests? Do tests have differential impact on members of different cultures and races? Do they act as 'gatekeepers' rather than assessment instruments?

Barriers to access:

i) financial constraints — members of this population may have no earning capacity while in training;

ii) access to child care facilities;

iii) a perceived lack of fair and systematic means of determining educational equivalencies and credentials across all trades and professions;

iv) a lack of English for Special Purposes (ESP) courses in trades and professions. These courses are needed in order that immigrants with experience and expertise can resume their employment with the appropriate job-related language skills;

v) a lack of Ministry and individual college policy on dealing with racism structurally (admissions procedures, etc) and attitudinally (teaching styles, relationships among staff, etc.)

vi) see also barriers cited in "Access to Potential."

Recommendations:

1. Targeted funding (as in the Ontario Basic Skills Program) is required for assessment and placement, outreach and counselling, and remedial/preparatory education program development (e.g., remedial and preparatory education which includes ESP courses).

2. Ministry Race and Ethnic Relations policies are needed which require individual colleges to adopt similar policies. Ministry adoption of educational and employment equity policies is also needed. These policies should require colleges to

collect data on staff and student representation, and to establish goals and timelines for meeting these goals.

3. Access to college programs should be increased through providing course (rather than program) registration and credit.

4. The system by which members of the College Boards of Governors are appointed should be revamped. Vacancies should be advertised in a range of newspapers, including the 'ethnic' press, and criteria and procedures publicized.

5. A system-wide commitment to research and data collection should be undertaken, so that patterns of racial/cultural representation in the student body of the colleges, by college and by program, are uncovered. Research should examine other patterns such as success/failure and drop-out rates which can be correlated with the linguistic, racial, and cultural backgrounds of students. This information is needed in order to develop and adopt educational equity plans.

6. On-going collaboration with community groups must ensure that these organizations have a voice in planning, providing and evaluating college services and programs.

7. Program development is needed in ESP courses, literacy and numeracy as well as curriculum review processes to ensure cultural sensitivity of curriculum.

8. Cross-cultural or anti-racist staff training must be specifically designed for administrators, faculty, and support staff. Training should emphasize the relationships in the sphere of daily work, the employees' rights and responsibilities under the current Human Rights legislation, and the employee's needs on the job (e.g., training for managers in handling complaints of racism).

Visible Minority Groups[37]

In the following recommendations, the Black community's experience has been used to illustrate areas which need to be addressed and which impact on the lives of many visible minorities in Ontario and, indeed, in Canada as a whole.

Recommendations:

1. Research: Data collected on the unemployment rates of graduates of high schools, colleges, and universities should be disaggregated on socio-economic and ethno-cultural/racial bases. Similarly, data presenting differential participation rates based on socio-economic status, ethno-cultural/racial background and gender should be analyzed. Data is also required on the demographic profile of college dropouts.

---

[37] Contributors: Wayne Burnett, Wilson Head, Philomen Wright.

2. Unemployment Rates: If empirical evidence shows that Black youth or visible minority youth generally have a higher level of unemployment, more college activity should be directed toward these groups, with specific reference to skills development.

3. Participation Rates: Groups which are underrepresented with respect to participation rates, as Blacks probably are, should be the recipients of targeted recruitment activities.

4. Disadvantaged Communities: Any expansion to college funding or facilities should consider opportunities to better serve disadvantaged communities. For example, a consolidation of Seneca College's west campuses might consider the high needs of the Jane-Finch community.

5. High School Dropouts: The college sector can and should respond to the needs of high school dropouts by designing special programs for drop-outs, joint programs with high schools targeted to 'at risk' youth, and more equivalency programs.

6. College Dropouts: Similar attention should be given to college dropouts. Causes of this phenomenon should be researched and potential solutions tested.

7. Race Relations Policies: A climate of tolerance must be promoted on all college campuses. Policies on race relations are essential in order that college graduates can be contributors to greater tolerance in society at large.

8. Sensitivity in the Curriculum: Sensitivity in the curriculum is required to ensure that stereotypes are confronted and obliterated. Training is necessary in order to ensure that future care-givers (in recreation, nursing, etc) are sensitive to the increasingly multicultural and multiracial society. College graduates should be prepared to be agents of change and proponents of equity.

9. Employment Equity: Employment equity is the policy of the Ontario government and the desire of most Ontarians. The black community has repeatedly called for mandatory employment equity. Ontario's community colleges need to review current staff audits, carry out further audits where necessary, and move decisively to ensure that society is well represented among college staff, both academic and non-academic.

10. Appointment Equity: Equally important is the need to ensure that college boards are representative of the communities they serve in terms of gender, ethno-cultural/racial background and geographic residence. If boards are not representative, appointment equity initiatives should be implemented.

Students with Special Needs[38]

The following vision for the college community, suggested by the Chairperson of the Provincial Advisory Council on Special Education, captures the underlying theme of many of the submissions to Vision 2000 from groups concerned with access for students with Special Needs:[39]

> A system which is aware of and responds to the needs of **all** students, including those with special needs, and which strives to enable **all** students to succeed.

The specific recommendations drawn from these submissions are summarized below. All of the submissions are based on the assumption that every college should be accessible to students with Special Needs. Within this context, many submissions identify a need for specialized resources and expertise, distinct from the need for centres of specialization for specific disabilities.

Recommendations:

1. All college programs and courses should be reviewed to identify essential objectives and alternative ways of achieving them, recognizing the diverse learning styles of different student populations.

2. Greater definition regarding the populations to be served by individual programs should be developed, e.g., programs for the developmentally handicapped.

3. Standardized system-wide policies and procedures to eliminate barriers and promote equal access for students with Special Needs are required, including the following:

- a basic inventory of technical aids should be available at each college;
- appropriate supports and outreach activities should be provided in order to ensure a smooth transition from secondary school to college;
- there should be greater integration of college services for students with Special Needs;
- services for students with Special Needs should be available during the evenings and weekends, as well as during the rest of the week;
- successful graduates who have Special Needs should be encouraged to act as peer supports;

---

[38] Compiled by Jane Kirkwood and David Robertson on the basis of written submissions to Vision 2000.

[39] Special Needs means disabilities (including learning disabilities) that impair an individual's ability to demonstrate academic competence.

- colleges should train students with Special Needs to become self-advocates;
- effective assessment services for students with learning disabilities should be available;
- bridging programs to the workplace should be developed and information sharing between colleges and employers on job accommodation should be encouraged;
- the experiences of successful graduates who have Special Needs should be marketed.

4. The need for research on adults with learning disabilities should be addressed.

5. The shortage of sign language interpreters should be addressed.

6. The colleges should implement deliberate initiatives to sensitize local college communities to the distinct needs and character of special-constituency populations, including the following:
- problems associated with the lack of teacher training for college faculty should be addressed;
- professional development to address educational and attitudinal needs of faculty should be provided;
- employment equity in the college system for people with Special Needs should be achieved.

7. Funding practices which result in systemic discrimination against people with Special Needs should be identified and removed. The following initiatives should be undertaken:
- college funding should provide incentives for developing part-time learning opportunities;
- adequate funding should be provided for students who are required to take part-time versus full-time loads by virtue of their Special Needs;
- preparatory programs should be provided with realistic funding;
- the percentage of the college's operating revenue which is allocated to education equity for people with Special Needs should be increased significantly;
- funding for systematic retro-fitting of college facilities should be provided in order to make them barrier-free by the year 2000.

8. Coordination among the Ministry of Colleges and Universities, the Ministry of Skills Development, the Ministry of Education, and the Ministry of Community and Social Services should be improved to ensure that the needs of students with Special Needs are accommodated through initiatives including the following:

- funding for special programs such as Futures and Ontario Basic Skills should address the fact that in these programs the percentage of students having learning disabilities is higher than in the general community college population;

- problems with the delivery of the Vocational Rehabilitation Services program should be resolved.

9. The Ministry of Colleges and Universities should establish a Special Needs Office to communicate regularly with each college.

Native Communities

During the course of Study Team 3's research, representatives of several native organizations were contacted and asked for their suggestions. In addition to several individual interviews and a group consultation with members of the Ontario Native Educational Counsellors Association, a representative of the Ontario Association of Friendship Centres and a number of native educators were interviewed. From their comments, several important themes and issues emerged. In 1988, the Education Secretariat of the Assembly of First Nations published the results of a major study of education for members of First Nations. Volume 4, A Declaration of First Nations Jurisdiction over Education, raises some important issues which were also expressed in our interviews and consultations. The Declaration states:

"First Nations view post-secondary education as absolutely essential. Post-secondary education is necessary to provide First Nations with well qualified personnel for effective self-government and for the management and operation of effective school systems. Post-secondary programs must be funded at levels which reflect inflationary costs and enrollment increases."[40]

The Declaration also states a number of important principles which were reflected in Study Team 3's interviews:

- It affirms the right to aboriginal self-government;

- It states that education is an inherent aboriginal right;

- It calls for First Nations control over First Nations education;

---

40 Education Secretariat, National Review of First Nations Education. (Ottawa: Assembly of First Nations, 1988) vol 4, p.31.

- It states that First Nations education is holistic, covering the complete range of educational needs, including post-secondary education, and must be of high standard;
- It calls for adequate funding for First Nations education.[41]

Our interviews confirmed that, in Ontario, as in the rest of Canada, post-secondary education for native people must be accessible, respectful of their cultural and linguistic traditions, supportive of self-determination and self-government, and must be of high quality. Provision of equitable access and quality of service to Ontario's native people will require a variety of initiatives, adapted to varying needs.

Currently, the Ministry of Colleges and Universities' Advisory Committee on Native Post-Secondary Education is preparing its report. The report is expected to be released in the early Spring of 1990.

Recommendation:

1. Vision 2000 should work with the Advisory Committee on Native Post-Secondary Education and should follow the recommendations of the Committee in determining ways to enhance equitable access and quality of service for Ontario's native peoples within the college system.

Francophone Communities[42]

Francophone members of Study Team 3 were also participants in the Sixth table, which included representatives from all five study teams. Table 6 has produced its own report with recommendations for college education for Franco-Ontarians. The recommendations listed below have been extracted from the Table 6 report.

Recommendations:

The network of French-language colleges should:

1. Offer the Franco-Ontarian community educational opportunities that meet both the community's expectations and the requirements of the labour market.

2. Develop an action plan to make its clientele aware of the services that it has to offer and to encourage this clientele to use these services.

---

41 As reported in Standing Committee on Aboriginal Affairs, <u>Review of the Post-Secondary Assistance Program of the Department of Indian Affairs and Northern Development: First Report</u>. (Ottawa; House of Commons), June, 1989.

42 Source: Anne Gilbert, "Vision Franco-Ontarienne de l'avenir des colleges" in <u>Additional Perspectives on the College System</u>. (Toronto: Ontario Council of Regents), 1990.

3. Introduce support services for its clientele, including housing, financial assistance, remedial French, new student services, guidance services, and women's support services.

4. Adequately respond to clientele with special needs, not only by designing training programs specifically for this clientele, but also by guaranteeing the support services it needs in order to take special training.

5. Become more open to the community by improving the community's access to its resources. Formal ties must be developed for this purpose.

6. Make cooperation between the colleges and the business community an integral part of programs.

7. Develop the means to make it possible to coordinate use of the network's resources with those of the community network; develop a strategy to strengthen Franco-Ontarians' pride in their heritage as well as their sense of membership within the community and their desire to respect one another and to be respected;

8. Create leadership centres.

9. Become directly involved in projects within the Franco-Ontarian community.

10. Represent the views of the Franco-Ontarian community on any issue related to Franco-Ontarian education, French-language occupational training, and the place of Francophones in the labour market.

Seniors[43]

Recommendations:

1. Comprehensive research should be conducted and shared system-wide about the future educational needs of older adults. A centralized data bank should be developed to collect information about seniors enroled in certificate, diploma and continuing education courses in community colleges. This data could include numbers of seniors, program areas, attainment levels, financial assistance required, special needs/support services required, placement upon completion, etc.

2. Older adults and representatives from the community and government agencies which serve seniors should be involved in planning, decision-making and program evaluation through college committees and boards.

3. Colleges should be well informed about industry needs for retraining of older employees as well as the placement of retrained 'young-old' graduates.

---

[43] Recommendations adapted from a paper prepared by Bernice Bell, Study Team 3 member.

4. Provisions should be made for faculty and counsellors to acquire increased knowledge and skills in working with seniors. Andragogy and gerontology should be incorporated in their teaching repertoire and on-going professional development plans.

5. The marketing of all college programs should be expanded and purposefully directed to include senior's needs and interests for retraining and second career education.

6. Admission criteria and accreditation should become flexible, respecting older adults' life experiences and prior courses at colleges or at work.

7. Fees should be charged in accordance with the principle of age-irrelevancy or age integration. Financial assistance should be made available to all economically disadvantaged students, including seniors.

8. For those seniors with less than grade 9 education, special consideration should be granted to them through admissions. In classroom requirements, special assistance should be offered to enable senior students to meet course expectations. This assistance may include age-appropriate academic tutoring, counselling, Special Needs, support services for people whose first language is not English or French, technical aids, etc.

9. While regular courses can be made attractive to seniors, specific courses should be developed as a secondary labour market for the provision of services to seniors by seniors.

10. College courses should be offered from integrated local community-based facilities, where appropriate, assuring suitable times and transportation if needed for seniors.

Women's Access to Non-Traditional Training[44]

The economic and social development of Ontario depends on opening employment doors to well-trained, skilled, female workers in technology and skilled occupations. Ontario's labour supply is expected to grow at 1.3 per cent per year between 1986 and 1996.

As the economy expands, there will be a greater need for skilled workers. There will also be fewer immigrants with skills to draw upon, a significantly smaller youth population to train, and an aging population of skilled workers. By 1996, women will comprise over 46 per cent of the provincial labour force. Therefore training for women must begin now in order to meet the needs of Ontario's expanding economy.

---

[44] Prepared by Carol Brooks, Steve Zerebny, and Bev Turner.

To ensure women's entry into skilled occupations, specialized training and supports must be provided to compensate for the barriers encountered by women who enter the non-traditional workplace. These barriers include:

- lack of access to internal training with employers and external employer-sponsored training;
- lack of access to training programs in the community;
- lack of access to affordable, quality child care;
- lack of transportation;
- sexual and gender harassment;
- negative co-worker attitudes;
- lack of access to informed career counselling which provides information on skilled occupations; and
- lack of understanding of women's learning needs by professionals.

In recent years, both the federal and provincial governments have attempted to address these issues, but advances have been made in a piecemeal fashion. There is still much work to be done to help women surmount these obstacles.

Three areas need to be addressed in any consideration of women's access to non-traditional training. These areas are:

- women's learning needs;
- women's training in technology and skilled occupations at the college level; and
- women's entry into and retention in apprenticeship training.

Women's Learning Needs:

Because many women use a relational learning style, it is necessary to establish learning environments in which they are accepted as fully-participating learners and in which they can relate positively and personally to instructors and other students. Breaking down the isolation women experience in traditional educational and business institutions is also critical to women's success in the workplace. Establishing support groups for women or building networking skills provide both role models and relational incentives for women learners.

At any level of training, women must have the opportunity to develop verbal skills, to discuss what they are learning and to utilize technical terminology. Verbalizing, as well as hands-on competency, are key factors in women's ability to perform successfully. These skills also ensure the growth of confidence and self-esteem required to see women through training and employment in a non-traditional occupation.

The fostering of analytical skills which allow women to recognize covert, negative signals related to sexual and gender harassment is essential to the

maintenance of a positive, unobstructed learning process. Effective communication and self-defence strategies for overcoming these barriers must be emphasized at all levels of training.

To ensure the effectiveness of any type of skilled training, instructors need specialized professional development which prepares them to work relationally and positively with women trainees.

Bridging Programs:

Before embarking on technology or skilled occupations training, many women need some compensatory education in math, science, and generic tool skills. Bridging programs provide this preparatory training which enables women to enter skilled trades programs. These bridging programs are vital to women's participation in a labour market which faces a severe shortage of skilled tradespeople. Bridging programs also address barriers through success strategies, confidence building and hands-on experience.

Reduced funding in bridging programs through direct federal purchases is a growing concern, and colleges must be innovative in accessing alternate funding mechanisms. In some communities, Community Industrial Training Committees (CITCs) have addressed the skills shortage through the funding of Women in Trades and Technology programs.

If the colleges are able to provide bridging and skilled trades programs which address barriers to learning for women, then access to apprenticeships remains the critical issue to be addressed.

Entry into Apprenticeships:

Fewer than 1 per cent of all apprentices in the construction, industrial and motive power occupations in Ontario are women. The average age of an Ontario journeyperson is between 55 and 65. In order to develop human resources to meet the needs of the economy, there is a vital need for employers to hire and train more women. This, in part, may be accomplished by colleges, community agencies, Boards of Education, the Apprenticeship Branch, and employers forming partnerships whose objective is to encourage women to enter and remain in apprenticeships. Also, linkages must be encouraged between bridging and apprenticeship programs.

One example of the type of initiative which is required has been developed by the Ontario Women's Directorate and the Apprenticeship Branch of the Ministry of Skills Development. Thirty demonstration projects are being sponsored across Ontario to provide outreach, employment development activities, and support services to assist women's access to apprenticeships. These projects aim to increase the number of women entering apprenticeship training in non-traditional skilled occupations, and the number of employers and unions training female apprentices

in these jobs. The project also aims to facilitate completion of apprenticeship training by female apprentices.

Recommendations:

1. The colleges should initiate partnerships with community agencies, Boards of Education, the Apprenticeship branch, and employers for the on-going development and funding of bridging programs.

2. The colleges should establish linkages between bridging programs, apprenticeship programs, and employers to ensure women's entry into and retention in apprenticeship programs.

3. The colleges should provide specialized counselling to women students in all levels of non-traditional training.

4. Instructors at all levels of skills training should receive professional development which prepares them to work relationally and positively with women trainees.

5. Women's access to bridging programs, skills training programs, and apprenticeship programs, which are free from gender discrimination, should be a priority of the employment equity offices in the colleges.

Access:

"... accessibility, in it simplest terms, means that post-secondary education must be available to the sons and daughters of people who have not themselves had the opportunity, and to those groups in our society who have not enjoyed equal opportunity to participate ..."[45]

"Access: The opportunity for students to enrol and succeed in appropriate college programs"[46]

Adequate Support:

Colleges provide adequate support by ensuring that all measures necessary for successful transition into and out of the college system, including financial resources, services and preparatory programs, are in place and are equitable and available to all students.

Educational Equity:

Educational equity involves the identification and removal of systemic barriers to educational opportunities that discriminate against women, visible minorities, aboriginal peoples, persons with disabilities, people living in poverty or members of other groups which have been identified as being under-served with respect to their needs for post-secondary education. Educational equity also involves the implementation of special measures and the application of the concept of reasonable accommodation when these are necessary to achieve and maintain a student group which is representative of the communities served.[47]

Employment Equity:

The Province of Ontario has defined employment equity as:[48]

---

[45] Brian Segal, Chair, Report of the National Forum on Post-Secondary Education. (Toronto: Council of Ministers of Education, Canada), 1988.

[46] Terry Dance, "Access and Quality: Preparatory and Remedial Education in the Colleges," Challenges to the College and the College System. (Toronto: Ontario Council of Regents), 1990.

[47] This definition is based on the definition of employment equity currently in use by Employment and Immigration Canada. See Employment and Immigration Canada, Employment Equity: A Guide for Employers, (Ottawa: Supply and Services Canada, no date, WH-3-596).

[48] The Ontario Human Rights Code: An Overview, (Toronto: Ontario Human Rights Commission) unpaginated.

"equal employment opportunity regardless of race, ancestry, place of
origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation,
age, record of offences, marital status, family status, or handicap ...
(E)mployment decisions should be based on merit, and not on criteria
that are unrelated to job performance."

Equity:

"Every individual should have an equal opportunity with other individuals to
make for himself or herself the life that he or she is able and wishes to have ...
without being hindered in or prevented from doing so by discriminatory practices
based on race, national or ethnic origin, colour, religion, age, sex or marital status, or
conviction for an offence for which a pardon has been granted or by discriminatory
employment practices based on physical handicap."[49]

Lifelong Learning:

'Lifelong learning' includes those purposeful activities that people undertake
with the intention of increasing their knowledge, developing and updating their
skills, and modifying or affirming their attitudes throughout their lifetimes.[50]

Quality of Educational Service:

Quality of educational service is both process and outcome. With respect to
process, quality of service is based on equitable access and its attendant concepts of
educational equity, lifelong learning, adequate support and on-going research for
planning and evaluation. With respect to outcome, quality of service is based on
relevance to learner needs, **relationships** with groups served and effective and
efficient distribution of **resources** in order to achieve optimum levels of educational
and occupational opportunity for a diverse group of present and potential students.

Special Needs:

For the purposes of this paper, the following definition of special needs has been
used: "Special Needs means disabilities (including learning disabilities) that impair
an individual's ability to demonstrate academic competence." Elizabeth Thorsen,
Study Team 3's researcher investigating issues related to special needs has
cautioned, however, that by the year 2000, Ontario's colleges should follow the lead

---

[49] Canadian Human Rights Commission, Canadian Human Rights Act: A Summary. (Ottawa:
Government of Canada, 1978.)

[50] Adapted from: Organization for Economic Cooperation and Development, Secretariat, Learning
Opportunities for Adults: Framework for a Comprehensive Policy for Adult Education. (Paris: OECD),
1975.

of the Human Rights Commission in developing a position on special needs which emphasizes 'reasonable accommodation,' rather than particular sets of physical, mental or learning characteristics. Elizabeth Thorsen, "Special Needs Students: Toward the Year 2000" in Colleges and the Communities. (Toronto: Ontario Council of Regents), 1990.

Sustainable Development:

A community-based process of planning and development directed toward achieving optimum states of human and environmental well-being without compromising the possibilities for other people, at other times and places, to do the same.

Systemic Discrimination:

Institutional arrangements, such as those affecting part-time learners, which mean that, despite the good intentions of everyone involved, some people are ultimately 'less equal' than others.[51] Systemic barriers tend to be visible only to those who experience them. The more effective the barriers are, the less likely it is that colleges will hear about them from those who are affected. Systemic barriers frequently have at least as much to do with what is not in place, as they do with what is. For example, absence of child care facilities, lack of or infrequent public transportation links to colleges during evening hours, inadequate financial assistance, absence of interpreters for deaf or readers for blind people, have all been identified as barriers by people who have not been able to access the college system, despite their desire to do so.

---

[51] See Vision 2000, With the Future in Mind: An Environmental Scan, (Toronto: Ontario Council of Regents), March, 1989, for a review of communities which have been identified as being under-serviced, or possibly under-serviced, by the colleges.

Appendix 3: Members of Study Team 3

Ruth Gates, Chair,
Vice-President,
Community Services,
Fanshawe College

Bernice Bell,
Teaching Master,
College Vocational Program,
Seneca College

Gordon Cressy,
Vice-President,
Development & University Relations,
University of Toronto

Sharon Goldberg,
Supervisor,
Continuing Education Conference Centre,
Sir Sandford Fleming College

Wilson Head,
Board of Governor Member,
Urban Alliance for Race Relations

Maureen Hynes,
Multicultural Coordinator,
Community Outreach Department,
George Brown College

Carolle Laflamme,
Agent de Développement Regional
Direction Jeunesse

Jill Morgan,
O.P.S.E.U. Negotiator,
Employment Counsellor,
Futures Program,
St. Clair College

Bev Turner,
Vice-President,
Access Programs,
Durham College

Philomen Wright,
Member,
Ontario Rent Review Board

Francie Aspinall, Executive Officer,
Teaching Master,
Centennial College

Carol Brooks,
Vice-Chair,
Social Assistance Review Board
Ministry of Community & Social Services

Louise Eaton,
Special Needs Coordinator,
Cambrian College

Jim Griffis,
Member,
Ontario Council of Regents

Patty Holmes,
Former Vice Chairperson,
Canadian Association of Independent Living
Centres

Jane Kirkwood,
Chief Analyst,
Commercial & Operational Services,
Ministry of Colleges & Universities

Valerie McGregor,
Director,
Aboriginal Post-Secondary Counselling Unit

Dave Robertson,
College Special Needs Consultant,
Centennial College,
Warden Woods Campus

Brenda Wall,
Project Director,
Metro Labour Education Centre

Steve Zerebny,
Program Coordinator,
Apprenticeship Branch,
Ministry of Skills Development

Appendix 4: Description of Study Team 3 Process

Study Team 3, Colleges and the Communities, met 10 times and was composed of 18 individuals (see Appendix 3) from community-based organizations, the colleges and government. Members represented the interests of diverse communities of learners. The team developed priorities and research questions; participated in consultations, workshops, and research; and in some cases, wrote constituency-specific recommendations for the final report. (See Appendix 1). They also assisted in redrafting background papers and the final report.

Under the guidance of the Study Team, five background papers were produced. Three were written in response to research questions identified during initial meetings. Additional papers were prepared examining the needs of students with disabilities and the needs of older adults. All of these papers and a summary of Vision themes have been published in a single volume of Study Team 3 background papers. (For Abstracts, see Appendix 6.)

In February 1989, the team solicited community input by inviting the submission of 'visions.' A guideline manual, *Imagine the Colleges in the Year 2000*, was distributed in English and French to approximately 800 groups throughout the province. We received approximately 60 visions, many of which represented coalition submissions and consultation with member organizations (see Appendix 7).

The Study Team 3 researchers and Executive Officer also conducted interviews and surveys with several individuals and community groups including Community Industrial Training Committees. Regional focus groups were held with community agency representatives in Windsor-Essex and Thunder Bay and District. Input was also received through several community workshops and conferences, college conferences, and ACCATO committee meetings (see Appendix 8).

In addition, material related to Study Team 3 was forwarded from other study teams, and our team participated in Study Team 4 consultations at Georgian, Sir Sandford Fleming, St. Lawrence and Canadore Colleges.

Based on the consultations and submissions received, Study Team 3 established priorities around access and equity, developed recommendations, and forwarded these to the Steering Committee. The last study team meeting was held in December 1989 and the Study Team 3 Final Report was sent to the Vision 2000 Steering Committee in January 1990. The Chair of Study Team 3, Ruth Gates, is a member of the Steering Committee which has continued responsibility for the development of final policy recommendations for Vision 2000.

Appendix 5: Submissions from Community Organizations & the Colleges

Vision 2000, a review of the Ontario college system's mandate, encouraged broad participation from many sectors, both inside and outside the colleges. Study Team 3 was greatly assisted by the ideas that people submitted through their written 'Visions.' As well as identifying themes from many of the visions, this report highlights more directly a sampling of some representative quotes from submissions. A list of Study Team submissions appears in Appendix 7: Visions Received.[52]

Individuals, coalitions, organizations, Community Industrial Training Committees, employers and college representatives wrote to us with many concerns and creative ideas about how colleges could best serve our increasingly diverse learners in the future. Although submissions often represented a particular perspective or group, many common themes emerged and these helped to form the Study Team 3 Final Report's recommendations to the Steering Committee.

A Values Statement for the College System

As they defined their vision of the college system, many contributors expressed principles, values and assumptions about the society and the college system they envisaged in the Year 2000. The following sample quotes illustrate some of the recurring ideas that have informed Study Team 3's recommended Values Statement in the Final Report (See Recommendation 1: Values).

> ... the government and the colleges must collaborate in maximizing accessibility to educational opportunities and further, must collaborate in educating Ontarians to the social and long-term economic toll of failing to improve the status quo.
>
> *College Committee on Student Affairs*

> A creative and responsive community college system would constantly be assessing who in this society needs information or skills to maximize self-sufficiency and quality of life ... and responding appropriately to them.
>
> *United Way of Greater Toronto*

Equitable Access and Educational Equity

Many visions began by clearly identifying the barriers faced by their often overlapping constituencies.

---

52   Copies of the full text of Visions submitted to Study Team 3 are held at the Ontario Council of Regents, Ministry of Colleges and Universities, 10th Floor, 790 Bay Street, Toronto, Ontario, M5G 1N8.

There has been a drift on the part of the Colleges of Applied Arts and Technology from the original mandate to provide skill training for grade 12, general level graduates. Instead, admission policies ... have catered to students with grade 12 advanced, grade 13 and even other post-secondary standing.

Chatham-Kent Youth Employment Counselling Centre

... women are concentrated in sectors and jobs with little access to employer sponsored training; ...women's responsibilities for child and household care in addition to paid work leave little time available for education.

Women's Program, Algonquin College

As these [adult training and retraining programs] are basically government sponsored programs for the chronically unemployed, the restrictive eligibility criteria ... in most cases limits participation of those who do not have the financial means to relocate to other communities.

Kirkland Lake & District Industrial Training Advisory Committee

The need to accelerate opportunities for access and educational equity has lead to public policy and legislation which significantly affect the college system. One such example cited was the Ontario Human Rights Code.

One of the purposes of these amendments [to the Ontario Human Rights Code] was to impose a duty on groups such as employers and service providers, like community colleges, to accommodate people with disabilities by removing barriers which hindered a disabled person's equal opportunity to participate ... Legislation in this province is unequivocal.

Equal Coalition
(11 Agencies representing people with disabilities)

Lifelong Learning

Many of the visions identified ways that colleges could support and promote lifelong learning. One recurring recommendation was that the distinctions between part-time and full-time students and programs be eliminated to reflect the reality of increasing part-time participation.

It is the understanding of this committee that current funding formulas related to part-time learners provide lower grants than those for full-time students. This is a disincentive to programs and activities that respond to part-time learners and funding should reflect this reality.

Advisory Committee for Developmental Care
for the Mentally Retarded Program, Sheridan College

... students should be able to transfer from full-time to part-time or vice versa, or take a combination of day and evening courses by merely accumulating their credits. Without such changes, many clients are virtually cut off from longer term training — precisely the training which leads to more stable and well-paid employment.

Times Change Women's Employment Service

Other submissions highlighted the importance of a continuum in the relationship between colleges and their learners. This would enable colleges to more effectively assess needs, plan and develop programs, evaluate their offerings and be more accountable to their communities.

Council urges the VISION 2000 Project to consider ways to educate teachers and counsellors at the high school level to increase their understanding of the abilities and needs of disabled persons.

Ontario Advisory Council for Disabled Persons

When a student successfully completes a course but then fails in the workplace, a follow-up by the College could determine where the course might have failed in making the student job-ready. This would be of great benefit in delivering future courses.

Victoria County Training Council

Adequate Support

Visions from various groups highlighted the specific forms of support that their constituents may require. They stressed that these supports should be planned in conjunction with individual needs assessment which take into consideration differences in cultural background and learning styles. Stabilized funding was also cited as essential for preparatory and access programs (outreach, bridging programs and counselling). These supportive services and programs were seen as ways to maximize learners' potential for success and independence.

Currently, the colleges receive no special funding for this [preparatory programming], but it may prove more cost-effective in the long run to provide it, thus enabling more students to complete a program successfully.

College Committee on Special Needs

In keeping with the nature of post-secondary study, the contact person for disabled persons should take care to arrange support contracts that will gradually lead toward independence rather than creating unnecessary dependence ... It is essential that the integrity of the student, his course and the institution be maintained.

Learning Disabilities Association of Ontario

... unemployment among blind and visually impaired persons is extremely high (estimates vary between 60-80 per cent). With access to

a quality education, many more blind and visually impaired persons could become productive and independent members of society.

BOOST (Blind of Ontario Organized with Self-Help Tactics)

Many contributors recognized that as the role of women continues to change in families and the workforce, participatory planning and adequate supports are critical to success.

Having a daycare spot on campus made everything easier.

The school needs programs which encourage parents to take that first step of committing to a college education ... the self-confidence to say "Yes, I can do this."

Durham Region Social Services,
Social assistance recipients enroled in
Single Parent Employment Program at Durham College.

Chronic unemployment, lay-offs, the realities of suddenly becoming a sole-support parent, the experience of abuse in the home are all factors which precipitate or accompany the retraining process for females ... any one or a combination of these realities points to the need for counselling and support networks which will empower the women to make the changes necessary to adapt to their new lifestyle.

Ontario Network for Women in Trades & Technology

Visions outlined ways in which the goals of lifelong learning and adequate support could also be enhanced by changes in teaching and delivery methods. There were many calls for more co-op programs and individualized, student-centred delivery.

... a 'Co-op' type of program based on individual needs would be more appropriate.

Cambridge Multicultural Centre

Individual instruction? Why not? Cost is not the major factor. The will to do it is. Helping everyone learn to their maximum potential has always been one of public education's favourite platitudes. By the year 2000, it will be an absolute necessity.

The Chamber of Commerce Niagara Falls

Research

Study Team 3 recommended that the colleges develop further capacity for research into learners' needs and changing conditions at local and provincial levels. Questions such as the one below will require research to inform planning and evaluation.

The demographic and ethnic composition of North York has undergone significant changes to reflect the influx of new Canadians

and the impact of the 'baby boom.' How can college programming adapt to the new community in North York?

Adolescent Sub-Committee,
North York InterAgency and Community Council

Ontario colleges were also seen as having a greater role in international education which would involve new approaches to recruitment, delivery, and professional and program development supported by research.

The Colleges will ... submit proposals for program development funds and bilateral projects through the Association of Canadian Community Colleges and participate in research activities of the International Development Research Centre.

College Committee on International Education

Quality of Service

The need for relevant programs and services, strong relationships with groups outside the college and the equitable and effective distribution of resources were all themes that surfaced throughout visions. These concerns were fundamentally linked to respondents' perceptions of quality of service.

Programs for Opportunity

Several community-based organizations and college representatives called for the promotion of generic skills so that students could be thoughtful, literate problem-solvers able to adapt more readily to change on the job and in society. General education, from the community to global perspective, was cited as important to citizens preparing for the 21st century.

... the most significant change in Ontario society by the year 2000? Ability to adapt to changes in technology — flexibility, generic skills.

Cambridge Industrial Training Committee

... If we are to achieve our goal of quality education, all aspects of college learning, specific career skills, general skills such as thinking and problem-solving, and the knowledge and attitudes needed to live well in the twenty-first century, must be directly addressed in the curriculum.

"Visions from St. Lawrence College"

Links with Community Organizations

Stronger links between colleges and community-based employers and organizations were repeatedly recommended in submissions. Some of the benefits expected through these relationships included opportunities for more informed

planning, more relevant course offerings, shared expertise and resources, and greater sharing of responsibility in decision-making.

> Partnership is the key to responsive training in the future. Colleges and the private sector will be required to closely collaborate in the communities' training efforts.
>
> *Sudbury Industrial Training Advisory Committee*

> Use or co-operate with the expertise of literacy practitioners in a community-based literacy program ...
>
> *Lake of the Woods Adult Learning Line*

> It is ... paramount to solicit the involvement of the deaf and hard of hearing community. An advisory council should be established with the majority being representative of consumer-oriented groups and organizations. This council could direct the establishment of services to deaf and hard of hearing students at post-secondary institutions.
>
> *The Canadian Hearing Society*

Human Resource Development

Community respondents encouraged the college system to provide more professional development for their personnel in two main areas. An important priority was that faculty continue to develop technical and professional skills related to the changing workplace. A second suggestion was that employees receive awareness training to respond more effectively to the strengths and needs of diverse learners.

> Consideration should be given to exchanging an instructor every 5 years with a person in a related industry. This would keep the College's courses up-to-date and would also be of great benefit to the companies involved.
>
> *Victoria County Training Council*

> There needs to be a strategic plan for Special Needs professional development within the colleges. There is a need for devising, assessing and planning an integrated approach.
>
> *"The Special Needs Student in the Year 2000"*

Well-developed employment equity practices were also seen as ways to create and capitalize on diverse expertise within the college, for the benefit of students, staff and the community.

> Our main concern would be that the staff and student body of all the colleges in Ontario reflect the cultural, racial, and ethnic diversity that now make up the population of Ontario, and which is likely to continue for the next decade and beyond.
>
> *Kingston and District Immigrant Services*

The presence of disabled staff gives a clear message to the student population that handicapped people are more ABLE than DISABLED, as well as making use of available talent.

VIEWS - For the Visually Impaired

Advocacy Role

Submissions reminded the colleges of their role in democratizing social and economic opportunities, both in domestic and international education.

Colleges which offer hope [to learners] by providing the opportunity to become literate and socially responsible could become a central focus for our communities.

The Lung Association

Ontario's colleges should become vigorous in bidding and obtaining contracts of a mutually beneficial nature from those nations which can afford to pay for educational and consulting services. At the same time, colleges should be proactive in becoming involved ... in support of those lands which are in desperate need of assistance.

College Committee on International Education

Conclusion

A critical challenge for the college system will be to find ways to continue this dialogue with those who are served by and contribute to colleges. It will be essential to create opportunities for representation, and for planning and decision-making with diverse communities. The future of colleges, communities and the larger global community will be best served by communicating clearly and developing the strengths inherent in our diversity.

Susan Wismer

Ontario's Community Colleges: Values for the Year 2000

As part of its contribution to Vision 2000's research, Study Team 3 initiated a research project designed to examine critical issues with respect to access and equity in relationships between colleges and communities. Part I of the research examined the founding values and principles of the college system and analyzed their relevance 25 years on. Based on interviews, consultations and a series of workshops with Study Team 3 members, a recommended values statement for colleges in the year 2000 was drafted. This paper reports on the results of Part I of the research project and includes the recommended values statement.

Susan Wismer

Towards the Year 2000: Communities within Colleges

This second paper in the series of three, reports on the results of Study Team 3's research with respect to access to college education. The paper suggests that an initial emphasis on developing full-time programs designed to meet the needs of young highly motivated high school graduates with a need for an intensive preparation for work has created a legacy of systemic barriers for those whose needs and interests are different. Overcoming those barriers through a commitment to the principle of equitable access will require the development of new policies, programs and services in a number of strategic areas including the following: lifelong learning, service to diverse groups, accountability practices, and planning.

Susan Wismer

Relevancy and Linkages: Colleges and Communities Working Together

The final paper reporting on the results of Team 3's research focuses on relevancy and linkages, as key elements in the provision of high quality and equitable access in college education. The paper identifies the following critical elements in ensuring relevance: an integrated approach to needs assessment; locally-based planning and decision-making; system-wide supporting structures; a learner-centred system; a focus on educational equity. Linkages — effective partnerships — were also identified as being critical to the development and maintenance of relevance. During the course of its work Study Team 3 received literally hundreds of suggestions regarding the development of linkages. These suggestions emphasized that colleges can form effective partnerships with community groups; that partnerships should be multilateral, operating at community, regional and provincial levels; that current jurisdictional problems inhibit the development of effective working partnerships; and that special partnerships are required in certain circumstances.

Bernice Bell

Post-Secondary Skills Training and Education for Senior Citizens

As the numbers of elderly persons increase, the college system will be called upon to provide more educational opportunities for senior citizens. This report examines the diverse needs of older adults, their various motivations for seeking college education, and the implications that these may have for the college system. The heterogeneous character of the elderly is highlighted, particularly of those individuals who continue to function independently and who have expectations about further education, employment, and community involvement. However a caution is noted about society and colleges placing a higher value on economically productive seniors. Colleges are seen also as leaders in training for services to the 'not-so-able elderly.'

Recommendations outline ways in which the college system can more effectively serve older adults through attitudinal changes, strategic planning and participatory decision-making, college program content and delivery, marketing, student and academic services, financial aid, attainment and placement and community consultation.

Elizabeth Thorsen

Special Needs Students: Toward the Year 2000

This paper describes the present and potential population of college learners and employees with special needs. The paper is divided into two sections. The first section presents background research about access for those with special needs. This includes a discussion about changes in definitions, the impact of legislative initiatives, and population profiles. The second section describes practices affecting students with special needs in both Ontario and other jurisdictions.

Several issues with implications for system-wide planning are discussed, particularly the dilemma of broad access versus specialization. Suggestions for partial rationalization are presented. The implications for changes in funding are discussed with particular reference to program delivery.

As part of the research, a survey was conducted. Results concern such issues as program access, barriers and linkage. Finally, recommendations for policy options are suggested.

Appendix 7: Visions Received

Approximately 60 formal submissions were made to Study Team 3 from community and college groups. Some of these included coalition submissions representing several individuals and associations.

In addition, Study Team 3 received some submissions sent to Study Team 4 that related directly to the needs of diverse groups.

College Committee on Student Affairs

St. Clair College Youth Employment Centre

VIEWS For the Visually Impaired, Toronto

St. Clair College Thames College Nursing Program

United Way of Greater Toronto

Kingston & District Immigrant Services

St. Clair College Med Lab Advisory Committee

The Lung Association, Toronto

Espanola General Hospital

Learning Disabilities Association of Ontario, Toronto

Social Development Council of Ajax-Pickering

Lake of the Woods Adult Learning Line, Kenora

Doreen Kronick, Learning Disabilities Consultant

Sault Ste. Marie Community Industrial Training Committee

North York Interagency and Community Council Adolescent Sub-Committee

College Committee on Special Needs

Equal Coalition - ARCH (11 Toronto and provincially-based agencies serving people with disabilities)

Cambridge Industrial Training Committee

Kirkland Lake and District Industrial Training Advisory Committee

Employment Services of Durham Region Social Services

Times Change Women's Employment Service, Toronto

Young Women's Christian Association, Oshawa

Program Advisory Committee for the Developmental Care for the Mentally Retarded, Sheridan College

Algonguin College Women's Program Coordinators

Loyalist College

Chatham-Kent Youth Employment Counselling Centre

L'ssociation canadienne-française de l'Ontario - Nippissing

Mary Jo Ternovan & Carolyn Haliday, ECE alumni, St. Clair College

Cambridge Multicultural Centre

Hong Fook Mental Health Service, Toronto

"Special Needs Students in Colleges"

Prescott-Russell Training Corporation Corporation

Ontario Advisory Council for Disabled Persons

Chaplain, St. Lawrence College

"The Special Needs Student in the Year 2000"

BOOST (Blind of Ontario)

North Shore Industrial Training Committee

Canadian Hearing Society

Kitchener, Waterloo, Guelph Community Industrial Training Committee (#1)

Victoria County Training Council

Ontario Network of Women in Trades & Technology

Algonquin College Christian Community

Sheridan College ECE Program Advisory Committee

Confederation College Vision

Kitchener,Waterloo, Guelph Community Industrial Training Committee (#2)

Early Childhood Education Advisory Committee, Seneca College

"International Education and the Ontario Colleges of Applied Arts & Technology," College Committee on International Education

Academic Council Task Force on Vision 2000, Collection of 15 submissions from St. Lawrence College (including visions on part-time learners, special needs, human resources development, student services and "community dialogues")

Rainy River Committee for Skills Development

Stormont, Dundas, Glengarry Industrial Training Council

Niagara Falls Chamber of Commerce

Sudbury Industrial Training Advisory Committee

Industrial Training Committee for North York and York Region

Algonquin College Management Centre Vision

L'association canadienne-française de l'Ontario, Conseil régional Oshawa-Peterborough

College Committee on Equity in Education and Employment

Fanshawe College Instructors, Women into Trades and Technology Programs

Appendix 8: Consultations

The Executive Officer and Study Team Members consulted with representatives of community groups, as well as college and government personnel who are in direct contact with diverse communities of learners.

The individuals listed below were part of these consultations. In addition, there were many others contacted by Study Team 3 members who participated in discussions which are reflected in members' Constituency-Specific Recommendations (See Appendix 1).

Terry Dance,
Dean of Access Programs,
George Brown College

Norman Lapointe,
ACFO (Association canadienne-française
de l'Ontario)

John Restakis,
English Literacy Co-ordinator,
Ministry of Skills Development

Hugh Armstong,
Associate Dean of General Studies,
Centennial College

Sandra Lang,
Director, Community Services Division,
Ministry of Community & Social Services

Robert Richardson,
Employment Counsellor,
Parachute Community Employment Centre

Pat Boland,
Researcher,
Ministry of Community & Social Services

Robyn Knapp,
Teaching Master &
Member of Board of Governors,
Centennial College

Douglas Bailey,
Ontario Native Alliance

Eva Nichols,
Executive Director — Learning Disabilities
Association of Ontario, and
Chairman — Provincial Advisory Council
on Special Education

Diane Burroughes,
Counsellor,
Seneca College

Aisla Thomson,
Director, Canadian Congress for
Learning Opportunities for Women

Gilles Gatien,
ACFO

Priscilla Hewitt,
Native Literacy Co-ordinator,
Ministry of Skills Development

Wendy Vermeersh,
Equal Opportunity Co-ordinator,
Sheridan College

Isabelle Clements,
Counsellor,
Centennial College

Thomas Vegh,
Employment Counsellor,
Parachute Community Employment Centre

Judi Bauer,
Provincial Coordinator,
Educational Support Services,
Canadian Hearing Society

David Youngwolf,
Chairman,
Toronto Urban Indian Council

Sheila Wahsquonaikezhik,
Ontario Native Alliance

Teresa Gonzales,
Consultant — Affirmative Action & Race
Relations, and
Principal — Adult Education Centre,
Kitchener, Ontario

Simmy Hyman,
Affirmative Action Coordinator,
Centennial College

Frances Rowe,
Legal Counsel,
Ministry of Colleges and Universities

Patrice Fleniken,
Mature Student,
Centennial College

Hon. John Sweeny,
Former Minister of Community and Social
Services

Alfred Abouchar,
Secretary General,
Council for Franco-Ontarian Education

Grace Shore, Facilitator,
Ontario Network for Women in Trades and
Technology
Program Consultant — Equal Opportunity,
Municipality of Metropolitan Toronto

Lyn Beak,
Community Outreach Officer,
Ontario Women's Directorate,
Thunder Bay, Ontario

Jean Bujold,
Vision 2000 Coordinator,
Confederation College

Anne Gilbert,
Researcher for Francophone Sub-group of
Vision 2000

Anita Shilton,
Ministry Analyst, Cabinet Office,
Office of Francophone Affairs

Irene Volinets,
Special Needs Counsellor,
Centennial College

Vic Murgaski,
Retired Teaching Master,
Centennial College

Carol Martin,
Native Educator, Vice Chair,
Social Assistance Review Board, Thunder Bay

Maggie MacDonald,
Instructor, WITT Program,
Fanshawe College

Karen Favalero,
Instructor, WITT Program,
Fanshawe College

Elizabeth Wood,
Mature Student,
George Brown College

Margaret Pollard,
Education Consultant,
Ontario Association for Community Living

Greg Sones,
Advocacy Resource Centre for the Handicapped

Gerry Gaughan,
Coordinator of Social Sciences,
St. Clair College

Karen O'Gorman,
Coordinator for Northern Literacy Program,
Canadian Hearing Society,
Thunder Bay, Ontario

June White,
Sole Support Mothers Project,
Durham Regional Social Services

Robert Mitchelson,
Vice-President,
Confederation College

Catherine Lengyel,
Government Relations,
ACFO

Nadean Koch,
Chairperson Applied Arts,
Sault College, Sault Ste. Marie, Ontario

Sylvia Maracle,
Director,
Ontario Federation of Indian Friendship Centres

Nancy Brady,
Health and Welfare Canada

Susan Booth,
Co-author of provincial Women into Trades and
Technology (WITT) Program Curriculum

Theresa Dietrich,
Instructor, WITT Program,
Fanshawe College

Judy Lavallee,
Native Youth Worker,
Golden Lake, Ontario

Wilma Jacobs-Taylor,
Coordinator of Native Studies,
Curve Lake, Ontario

Ed Schreibler,
Lakehead School Board,
Thunder Bay

Josie Necan,
District Representative,
Ontario Native Education Counsellors
Association, Osnaburgh, Ontario

Pat Armstrong,
Chair, Sociology Department,
York University

Marg Simpson,
Counsellor,
Sault College

Tom Williams,
Educational Counsellor,
Walpole Island Reserve

Jerry Perrault,
Assistant Director of Education,
Rainy Lake Ojibway Education Authority

Janice Dembo,
Mayor's Committee on Race Relations,
Toronto

Mario Calla,
Executive Director,
COSTI

Howie Sinclair,
Executive Director,
Ontario Council of Agencies Serving Immigrants

Michelle Farrell,
Senior Policy Analyst,
Ministry of Colleges and Universities

Rigby Kwok,
Director,
Ontario Chinese Restaurant Association

Ratna Omidvar,
Toronto Office Skills

Linda Reid,
Newcomers Services Branch,
Ministry of Citizenship

Barbara Chum,
Education Program Manager,
Moose Factory, Ontario

Daisey Munroe,
District Representative,
Ontario Native Education Counsellors
Association, Osnaburgh, Ontario

Elizabeth Thorsen,
Researcher,
Special Needs Students

Rose Caicco,
Teaching Master,
Sault College

Wayne Burnett,
Teacher,
North York Board of Education

Paul Bourgeois,
Peterborough Representative,
Ontario Native Education Counsellors
Association

Akua Benjamin,
School of Social Work,
Ryerson Polytechnical Institute

Mary Bruce,
Director Equal Opportunity Division,
City of Toronto

Volney Campbell,
Chair, Education Committee,
Urban Alliance on Race Relations

Alice de Sousa,
Portuguese Inter-Agency Network

Karl Fuller,
Alternative Computer Training for the Disabled

Mary Rowles,
Equal Opportunity Coordinator,
OPSEU

Tanya Onyschuk,
George Brown College Board of Governors

Charles Smith,
Community Relations Officer,
Multicultural and Race Relations Division,
Toronto City Hall

Julia Tao,
Chinese-Canadian National Council

Alvin Lander,
School of Social Work,
Ryerson Polytechnical Institute

Phil McLaren,
Organizational Resources Counsellors,
(ORC Canada Inc.)

Most Reverend J.A O'Mara,
Bishop of Thunder Bay

James Foulds,
former Thunder Bay M.P.P.

Kevin Nymark,
Supervisor of Older Adult Programs and Services,
Parks and Recreation Dept., Thunder Bay

Faye Frith,
Ministry of Community & Social Services,
(Centennial college alumni)

Sharon Goldberg,
Supervisor, Continuing Education,
Sir Sandford Fleming College

Terry Anderson,
Director,
Northwest Regional Co-ordinating Centre,
Contact North/Contact Nord

Bonnie Sormin,
S.M.I.L.E.,
Durham Dept. of Health Services

Lynn Forbes,
Family Counselling,
Durham Regional Social Services

Dagmar Busshoff,
Board of Education — Bowmanville,
Centre for Industrial Studies

Lynda Sauriol,
Manager,
Durham College Employment Equity

Olga McGuay,
Durham Dept. of Health Services

Denis Bergerond,
Literacy Life Skills Coach
Canadian Hearing Society, Thunder Bay

Pierre-Eddy Toussaint,
President,
Association Multiculturelle Francophone
d'Ontario

Maria Wallis,
Women Working with Immigrant Women

Gladys Wonderly,
Board Member,
Nokeekwe Skills Development Organization

James McCuaig,
Director,
Lakehead Board of Education

Rev. Keith Boyer,
Thunder Bay

Charles Grant,
Manager,
Marlin World Wide Travel, Thunder Bay

Bill Kuehnbaum,
Teaching Master,
Cambrian College

Judy Roberts,
Director,
Northeast Regional Co-ordinating Centre,
Contact North/Contact Nord

Jim Turk,
Director of Education,
Ontario Federation of Labour

Sue Misiewicz,
C.E.I.C.,
Ajax

Lawrence Settle,
Prospects,
Durham Regional Social Services

Linda Mantzel,
C.E.I.C.,
C.J.S. Unit, Oshawa

Lori Cook,
Officer,
Durham College Special Needs

Noreen Finnigan,
Information Ajax/Pickering

Lily Chin,
Literacy Life Skills Coach
Canadian Hearing Society, Thunder Bay

Julie Carrol,
Y. W. C. A.,
Oshawa

Members of
College Committee on Special Needs, ACAATO

Members of
College Committee on Student Affairs, ACAATO

Participants in
Brock University Special Education B.Ed program
for College Faculty

Participants in
Ontario College Chaplains Group

Participants in
Vision 2000 Management Development Institute
Conference

Participants (representing 18 agencies) in
Windsor-Essex Community Agencies focus group
(St. Clair College)

Participants (representing 21 agencies) in
Thunder Bay & District Community Agencies
focus group (Confederation College)

Participants in
Parachute Employment Centre community focus
group

Participants in
Workers and Communities Conference,
York University

Participants in
Managing Diversity,
Ministry of Colleges & Universities Conference

Members of
College Committee on Equity in Education and
Employment, ACAATO

Participants in
Conference for College Boards of Governors,
ACAATO

Participants in
Ontario Native Education Counsellors Provincial
Conference

Participants in
FACETS Conference for College Faculty,
Georgian College

Participants in
St. Clair College Social Sciences Department
Vision 2000 meeting

Participants (representing 6 agencies) in
Durham Community Agencies meeting
(Durham College)

Participants in meeting with
Canadian Hearing Society/Equal Coalition
Advocacy Group representing 11 Metro and
provincial agencies for people with disabilities.

Participants in
Vision 2000 College Visits to St. Lawrence, Sir
Sandford Fleming, Canadore, and Georgian
Colleges

Participants in
Toronto 2000: Transcultural Realities Workshop,

Participants in
*The Contemporary Women's Movement: Issues
and Impact* Workshop,
Ontario Public Interest Research Group

Participants in
Equal Opportunities Entering the 90s, Conference,
Equal Opportunities Division, Toronto City Hall,